

SCHOLASTIC COACH

MAY 1959 • 35c



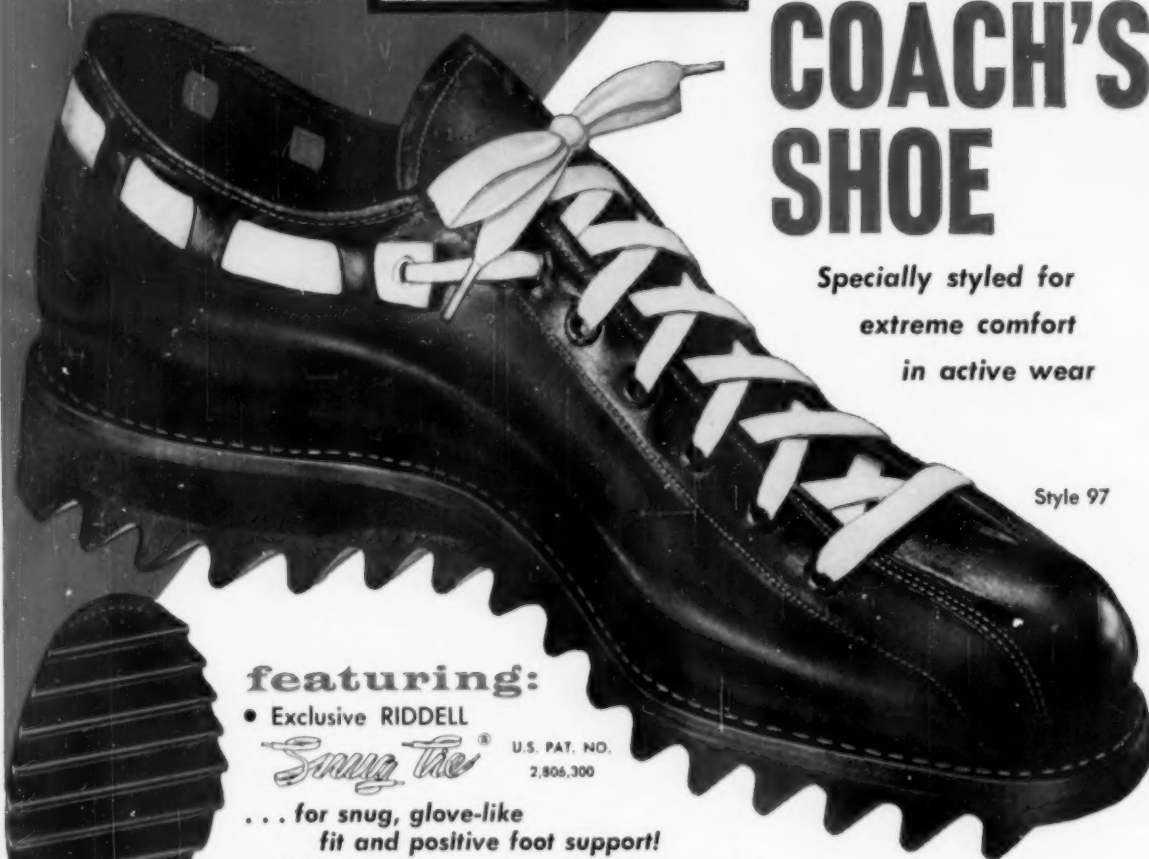
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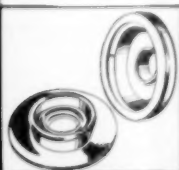
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SCHOLASTIC COACH

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VOLUME 28 • NUMBER 9 • MAY 1959

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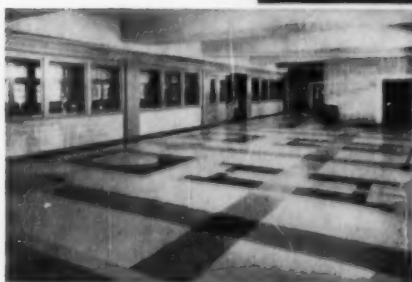
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It will, gentlemen, it will.

SHORTLY after World War II, our football department never had it so good. Anytime we wanted the scoop on a famous football coach, we sicked our No. 1 coaching school operative on him.

Our agent, a high school football coach, was literally a genius at transcribing coaching school lectures, missing nary an O or an X. Thanks to our peripatetic correspondent, we got all the scoop, piping hot, on such great coaches as Dick Harlow, Lynn Waldorf, Bobby Dodd, Wally Butts, and Charlie Caldwell.

Alas, all good things always come to an end, and we finally lost our ace reporter. Thanks in part to his fabulous reports in *Scholastic Coach*, our man moved up into the college ranks and became much too busy and much too important to continue his coaching school chores.

Strangely enough, in all of the years he worked for us, we never met him! In fact, it was only after 14 years and 12 articles that we caught up with him. At the last National Football Clinic in Atlantic City, we ran smack into a short, graying gentleman wearing a badge inscribed, "Ben Schwartzwalder." We promptly brush-blocked him into a corner, introduced ourselves, then spent a most pleasant half hour reminiscing.

Ben, now one of the most famous coaches in America, recalled his reporting days most fondly. "What I remember most," he mused, "was my coaching school report on Dick Harlow's single wing.

"Dick's time suddenly ran out after he had diagrammed just three plays. Studying my notes later, I was unhappy with the report. Imagine having a red-hot formation with only three plays.

"So, rather than discard the report, I took it upon myself to improvise about six more plays. And that's the way the report appeared in *Scholastic Coach*.

"The following year, on my rounds of the coaching schools, I again found myself in an auditorium with Dick on the rostrum. 'Is a fellow named Schwartzwalder in the room?' Dick inquired. Oh, oh, I thought, he's probably going to tear into me for making up those plays.

"I raised my hand. Dick grinned from ear to ear. 'I just want to thank you for those plays. I put 'em into my system and won some ball games with them!'"

On the subject of modern offense, Ben is most impressed with the trend toward diversification. "Take Oklahoma, for example," he told us. "They used only eight plays for years and years. But look at them now!"

"When Syracuse and Oklahoma were matched in the Orange Bowl last January, we agreed to exchange five of our 1958 game films. Upon analyzing their movies, we discovered that in those five games Oklahoma had attacked from 26 different formations.

"In short, they were now using more than three times as many formations as they once had plays!"

WE'VE always said it, our surveys have always proved it, and now we know it's true—that *Scholastic Coach* is read by more high school and college coaches and athletic directors than any other magazine.

Our golden source of truth is a national direct mail survey made by *Sports Illustrated*. Under the heading, "High School and College Coaches and Athletic Directors, The Magazines They Read," the "scorecard" reads as follows:

<i>Scholastic Coach</i>	91.4%
<i>Athletic Journal</i>	78.6%
<i>Sports Illustrated</i>	77.1%
<i>Coach and Athlete</i>	45.7%
<i>Journal of Health</i>	37.7%

No other magazine recorded as much as 5% readership.

So there, *Scholastic Coach* is way out in front in the coaches' readership race!

UPON returning from lunch one day last month, we were informed that our friend, Elias Gilbert, the world's greatest hurdler, had been in to see us and would probably return in a half hour or so.

Elias never did show that noon, but he did come by again a few days later. "Sorry to have missed you," we apologized. "But what are you doing in New York?"

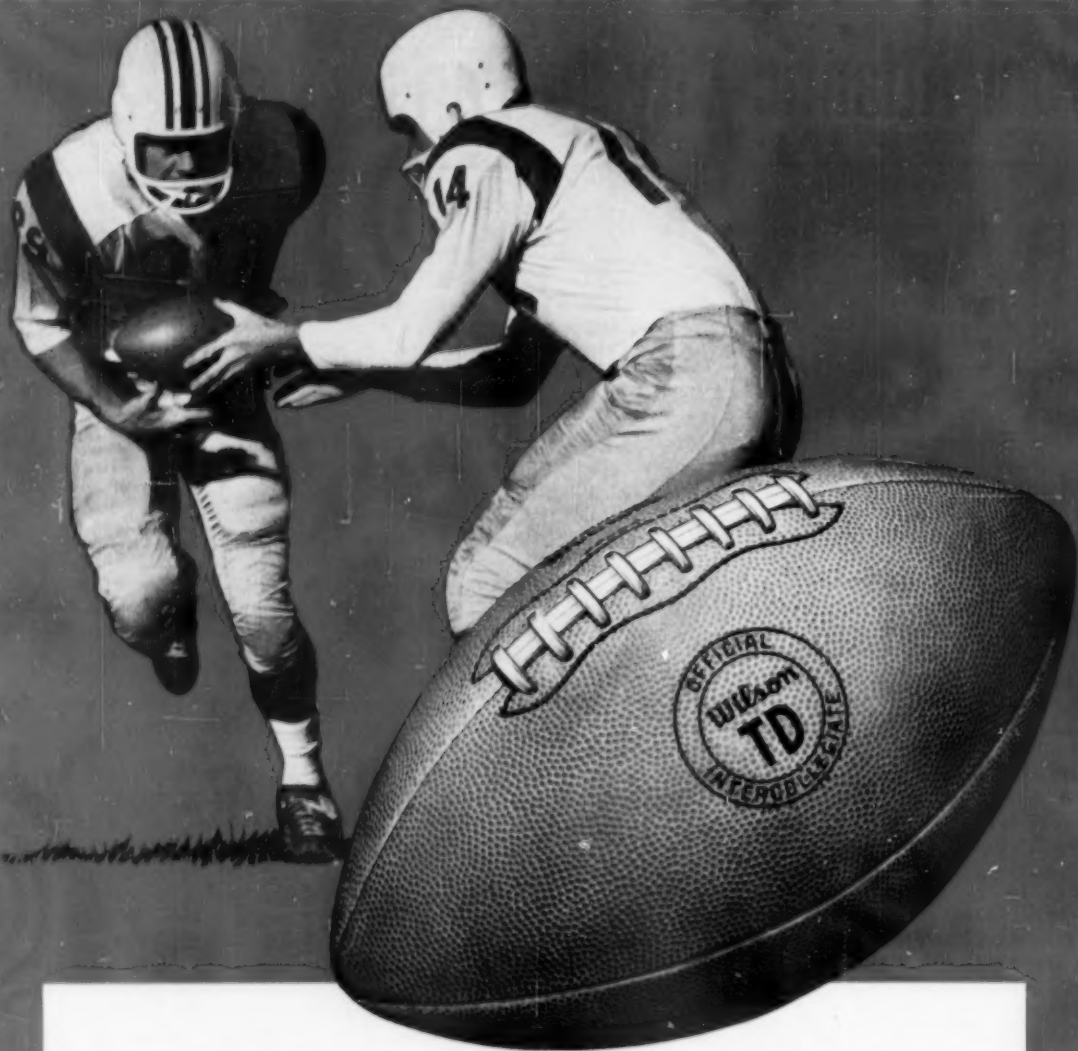
The wondrous timber-topper grinned. "Who's visiting New York? I've been to Paris and back!" It seemed that Elias had been part of a crack five-man AAU team that had competed in the French capital. They had been flown to Paris, had competed in the meet, been given a whirlwind tour of the sites, and flown right back—all in a long week-end!

Chatting about the tremendous nervous tension which athletes are subjected to game after game, Elias calmly rejected the premise.

"Who's nervous?" he said. "All I try to do is get to the finish line as fast as I can. I never worry about the opposition. I let them worry about me. And you'd be surprised how many times you can win a race just on your reputation. A lot of fellows do so much worrying about

(Continued on page 51)

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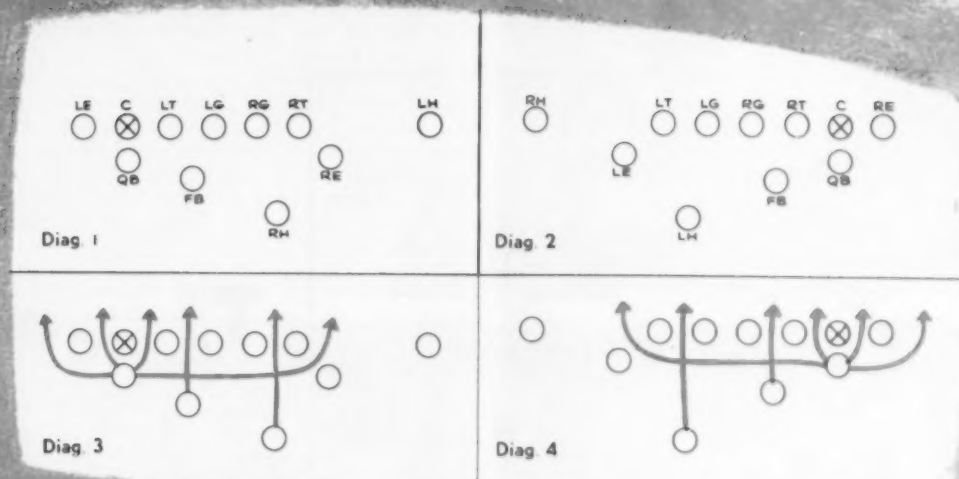
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LAST SUMMER I attended a football clinic at which Coach Bud Wilkinson of Oklahoma made an astonishing remark for the leading proponent of Split T football. He said:

"Five years ago, I'd never have believed or admitted that the defense would ever be able to catch up with the Split T offense. But I've now reached the conclusion that no football team can consistently win against equal opposition using only the pure Split T attack."

Coach Wilkinson then went on to explain one way in which he's tried to loosen up the defenses that were beginning to gang up on the Split T. That's with the use of the unbalanced line and backfield. Coach Wilkinson began to use it in the fall of 1957 and then exploited it to the fullest in the 1958 Orange Bowl game against Duke, which Oklahoma won, 48-21.

Having used the Split T since 1954, and having run into the same problems Coach Wilkinson spoke of, namely seven and eight-man lines, or eight and nine, or even ten-man fronts, I decided to try and adapt the Oklahoma unbalanced attack for Reynoldsville during the 1958 season.

Diags. 1 and 2 show the right and left unbalanced formations we used the past year which were patterned after the Oklahoma attack. With the possible exception of a slight difference in spacing, these are the iden-

tical formations used by Coach Wilkinson.

We used a 6 to 18 inch split between our linemen, with the flanked halfback on the line of scrimmage anywhere from 5 yards out.

The strong-side end became the wingback 1 yard off the line of scrimmage and from 1 to 3 feet outside the tackle. This was done to exploit the end as a blocker on running plays to the wide strong-side, and to better utilize the speed of the halfback as a potential deep pass receiver.

Our fullback lined up 1 to 2 yards off the line, while our diving halfback set up between 5 and 7 yards deep. The quickness of the fullback and halfbacks determined the depth of their positioning. We wanted our fullback and diving halfback to hit into the line as quickly as possible and to be on the line of scrimmage when the quarterback faked or handed the ball to them.

After much experimentation, we found that our fullback needed to station himself 1½ yards deep, our right halfback about 6½ yards deep when he was the diving back, and our left halfback 5½ to 6 yards deep when he was in the diving halfback position.

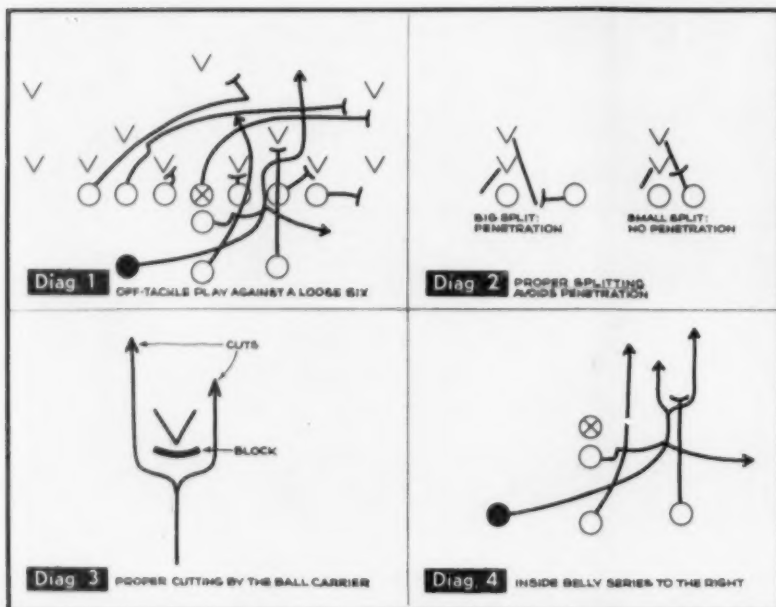
Diags. 3 and 4 show the several points of attack we hit with running plays from the unbalanced formation.

Our quarterback calls no play in
(Continued on page 44)

Oklahoma's Unbalanced Split T

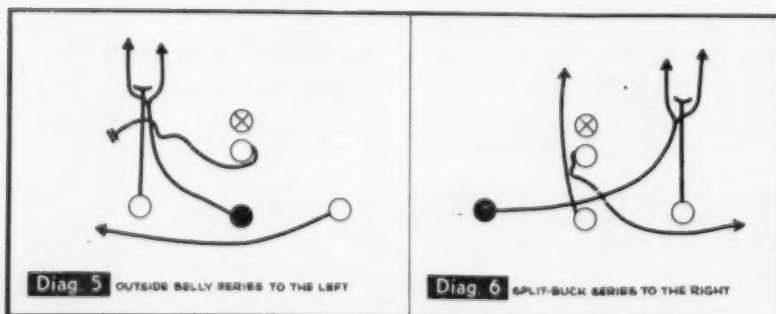
By **HARRY E. CLARKE, Jr.**

Reynoldsville-Winslow (Pa.) High School



SPLIT T OFF-TACKLE BLOCK BUSTER

By J. STIELSTRA, University H. S., Ann Arbor, Mich.



THE mainstay of our Split T attack is an off-tackle play that has averaged between six and seven yards per try. Of course, averages may be misleading. One or two long runs can distort any average beyond effective appraisal. So, to obtain a more reliable evaluation of our offense, we've adopted the Ohio State method of measuring a play's consistency.

At Columbus, a consistent play is one that gains three yards or more. With this as a yardstick, we've discovered that our off-tackle plays have been consistent 80% of the time. When you remember that a consistency of 70% is satisfactory for any play, you can understand why we're sold on our off-tackle number.

In describing this play (**Diag. 1**), it's necessary to come to an understanding on some basic principles.

Firstly, we're strictly a split-line team. Our split rule is as follows: "All linemen should split four feet from their adjacent teammate unless (1) there's an opponent in your inside gap whom you're assigned to block; (2) your adjacent teammate is covered by a tandem, meaning a defensive lineman with a linebacker directly behind him; (3) we're going to run outside."

In the case of exception number (1), we feel that to prevent penetration by a defensive lineman, our lineman must be "half a man on him." This means he must be directly in front of at least half of the defender's shoulder width to prevent the defender from beating him through the gap and getting penetration. Penetration disrupts our backfield techniques and may be disastrous even though the offensive blocker can move the defender laterally.

In the case of exception number (2), we believe that a tandem is always a potential stunt situation, and one of the stunters can beat our blocker through the gap if the blocker is too far away (see **Diag. 2**). This again results in undesirable penetration.

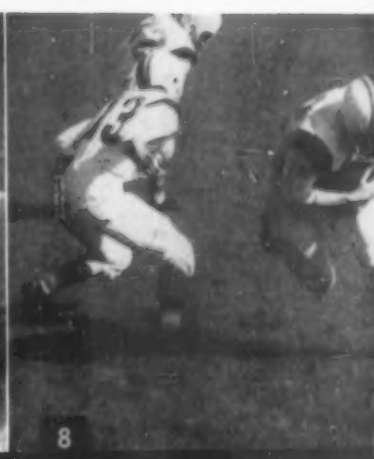
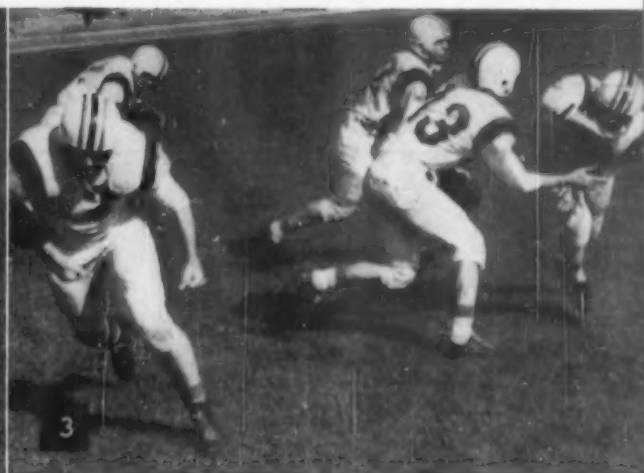
In the case of exception number (3), the reason for tightening the line is to shorten the distance the ball-carrier must run before turning up-field.

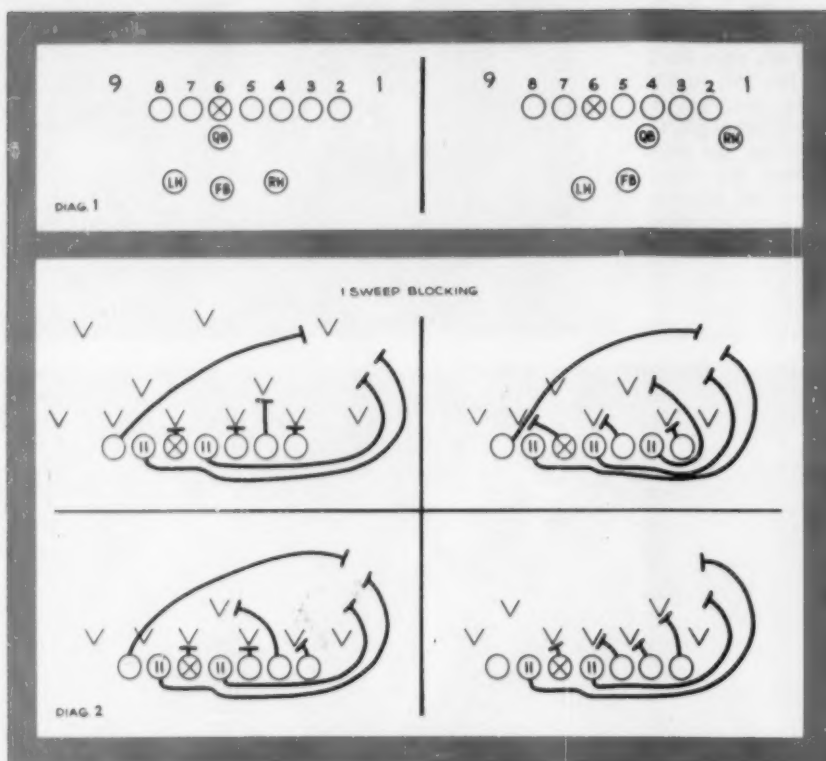
Secondly, we believe that our line must control the line of scrimmage. We must drive the defenders back at

(Continued on page 56)

FULLBACK OFF-TACKLE PLAY

Upon receiving the ball from center, the quarterback steps up and out, holding the ball at belt level with both hands. He steps with his right foot and offers an open-hand fake into the left half's stomach, who covers up beautifully and drives straight ahead. The quarterback then fakes a pitch-out to the swinging right half, and slips the ball into the fullback's stomach. Note how the hand gives with the pass, and how the receiver quickly cradles the ball in his stomach. The quarterback's final move, not shown, is a drop-back into passing position.





Missouri's Simplified Multiple Offense

By **DAN DEVINE** (HEAD COACH)

I'VE HAD many high school coaches tell me that they like the multiple offense but can't use it because of their limited time on the practice field.

Actually, multiple offense merely entails running a single play from a variety of formations. Since few new techniques are involved, it really requires little more practice time. Yet at the same time it forces the opposing coach to spend valuable time defending these formations. This, I think, is the strength of the multiple offense.

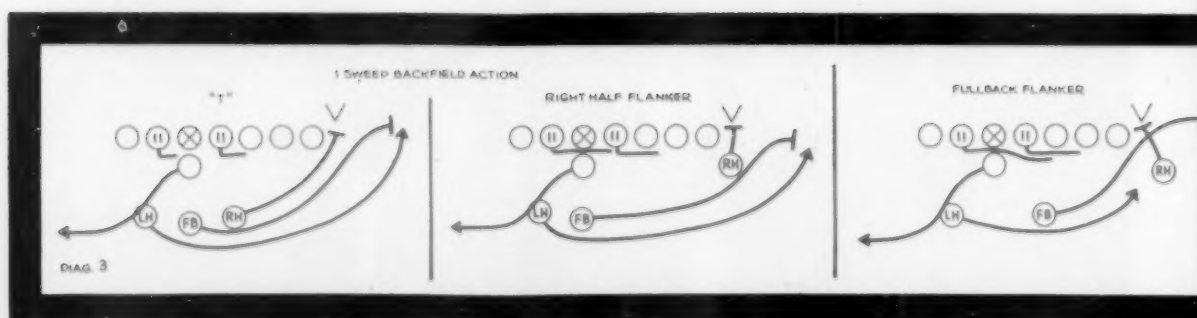
Most coaches use a certain amount of diversification. You rarely see a high school team that doesn't either split an end or break their backfield at least a few times during the game. Although we're an unbalanced line team and run mostly a trapping offense, it's possible to run a variety of formations with all offenses.

It's easy to illustrate this principle with our sweep plays—the sweep to the right (the 1 sweep) and to the left (the 9 sweep) are basic to our offense. **Diagram 1** shows our numbering system.

We ran our 1 sweep from six different backfield alignments last fall and never changed our blocking rules. Of course, there are many more we could have used, but it's also possible to spread yourself too thin offensively. That is, put in so many formations that you can't work on them all.

Diagram 2 shows the basic blocking for our 1 sweep against a few standard defenses.

Diagram 3 shows our 1 sweep from the six formations we used last fall. There are a few new techniques to learn; i.e., the right halfback has to block the end from two or three different angles; but his assignment is the same in that he always blocks the end. We've found that the enthusiasm shown by the players whenever a new formation is put in more than compensates for the few new techniques that must be learned.



We're sold on the value of the single wing aspect of our attack and feel that it can be added to any offense and be well-worth the small time it takes to install. It's equally effective from balanced and unbalanced lines.

A major problem in installing the single wing seems to be the shift. When the players are learning it, they continually jump off side and use too much field time. We had this trouble early in the fall, so we came out of the huddle shifted for two games. Although we went back to shifting later in the year, we did find it was possible to save time and error early in the year by throwing out the shift.

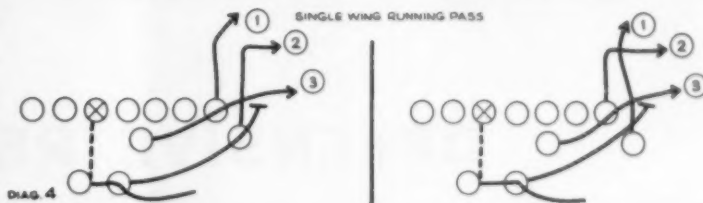
The single wing running pass is hard to defense and easy to install which makes it, I think, worth your consideration. Use the same blocking in the line as for your roll-out or action type pass. Since your full-back probably blocks the end on some of your plays, the only new learning process is probably the center to left half exchange.

You can help this and give early confidence to your center by putting all the burden on the left halfback to catch the ball wherever it's centered, since it isn't necessary for the tailback to get a fast start. **Diag. 4** shows the single wing running pass. This ties in, of course, with the single wing 1 sweep shown in **Diag. 3**.

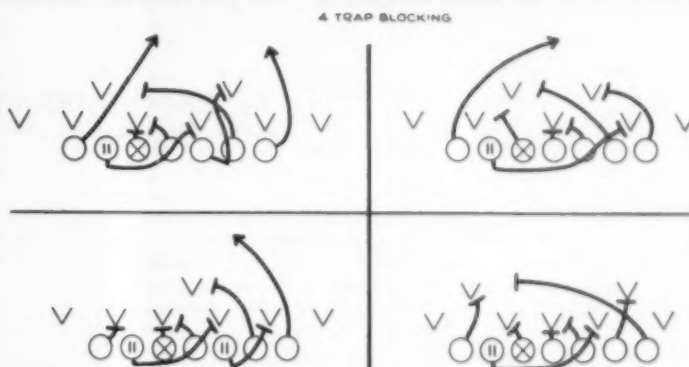
To include a play up the middle from the single wing, it's only necessary to have a direct snap to the fullback on a short trap to the right of the center. This again points up the important aspect of the multiple offense, as shown in **Diag. 5**. This illustrates our short trap, called the "4 Trap," against several defenses.

Diag. 6 shows the various backfield actions and formations we use on the same trap. You no doubt have some other action with which you could use this same trap.

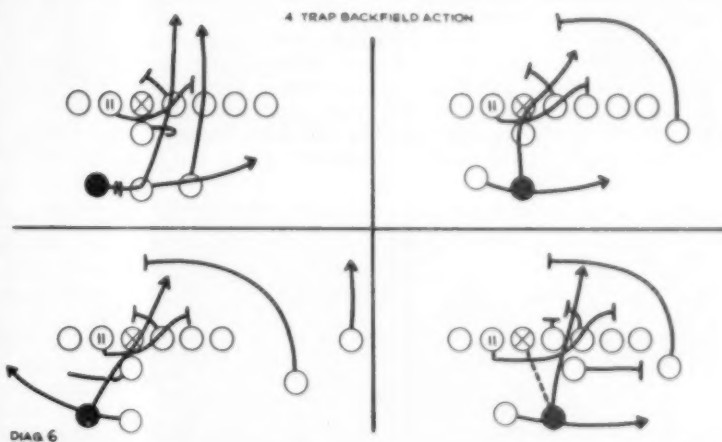
I've tried to point out that any-
(Continued on page 69)



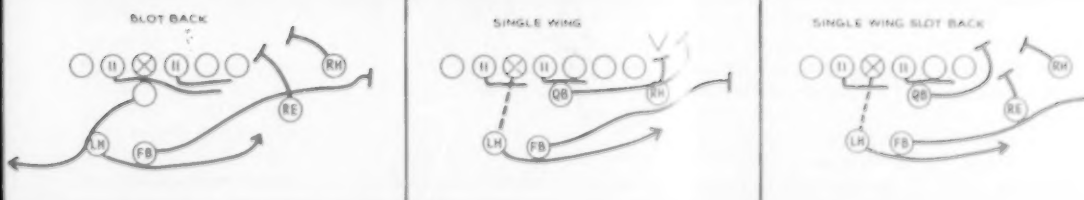
DIAG. 4



DIAG. 5



DIAG. 6

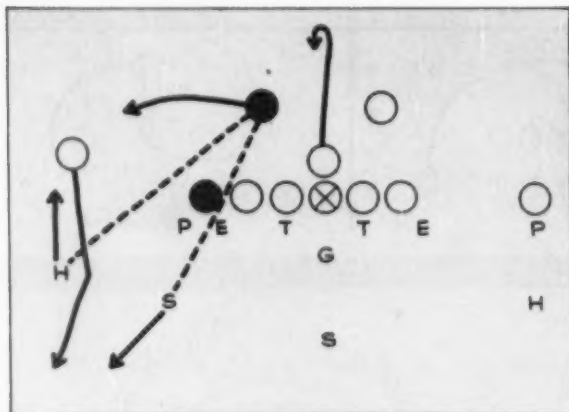


OFFENSIVE READING, Multiple Synchronized Keying

By **JOHN N. HOOPER**
Assistant Coach, Colgate University

IN RECENT YEARS there has been a definite trend by defensive strategists to systematize their individual secondary assignments through a process called offensive reading. As opposed to keying on the initial movement of a single offensive player ("Keying from the Corners of the Umbrella Defense," June 1956 *Scholastic Coach*), reading is a promising new form of professional technique that patterns itself around the movements of several predetermined offensive positions.

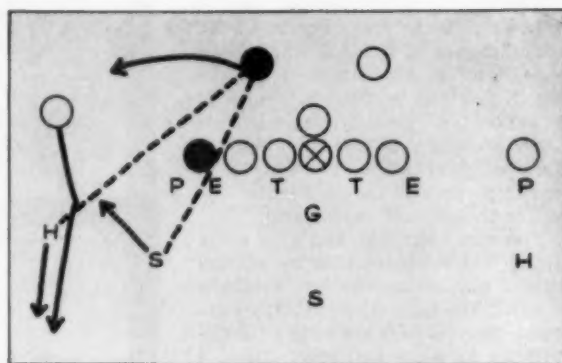
Actually, reading involves the intricacies of peripheral vision, and depends completely upon the abilities of the defense to gain a reliable key through the synchronized movements of several offensive players. The technique of reading has developed primarily out of the inadequacies of the single defensive key. It's an extremely complex system, one that demands the services of highly skilled personnel.



Diag. 1, normal keying on flaring HB by S in rotation pattern (Charlie Winner, Colts)

During a recent conversation with Coach Charles Winner of the Baltimore Colts, I was informed how the pros inaugurated offensive reading as a safeguard to their basic keying assignments. On specific occasions many of their individual defensive keys proved unreliable. This situation is illustrated in **Diags. 1-3**.

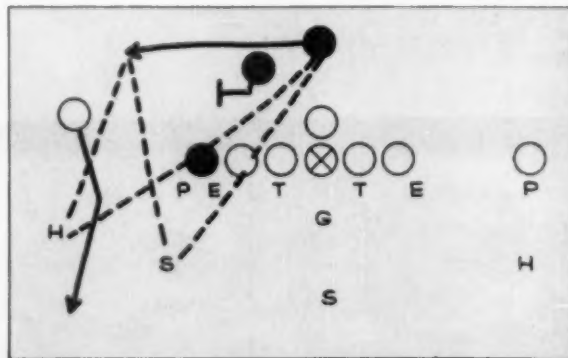
On halfback flare patterns, a predetermined coverage is normally triggered by the use of a primary key through the offensive end to the on-side halfback. If a rotation pattern is called, the left defensive safety



Diag. 2, normal keying on flaring HB by S in man-to-man coverage (Charlie Winner, Colts)

would normally be responsible for a receiver entering the outside deep area, **Diag. 1**. Conversely, if man-to-man coverage has been predetermined, the safety man must advance to defend the roll-out threat to his side, **Diag. 2**.

For both forms of secondary coverage illustrated in **Diags. 1-2**, the single key has usually proven adequate. In recent years, however, coaches have adjusted their flare patterns to capitalize on specific keying weaknesses, and initial halfback flare motion has ceased to be an adequate focal point for "key hungry" defensive backs. **Diag. 3** illustrates just such a play.



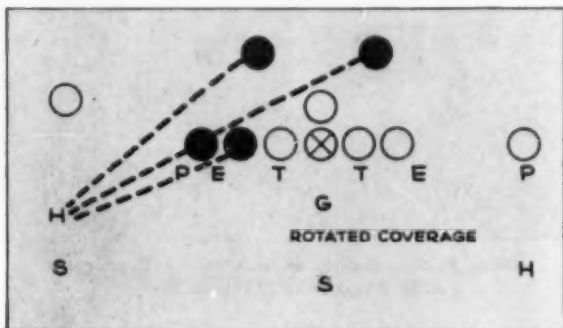
Diag. 3, adjustment of flare patterns to exploit keying weaknesses (Charlie Winner, Colts)

On this pattern the halfback stays in as a pass protector, and the remaining deep back (in this case the fullback) becomes the flare man. Although this change appears simple enough in nature, it can have far-reaching effects when half of the defensive backs are keyed here.

To alleviate this situation and others similar to it, many professional teams have developed an alternate to their basic keying game, a supplementary technique known as reading. As previously mentioned, this is a system of multiple synchronized keying that broadens considerably the defensive focal points.

Notice in **Diag. 3** that the left defensive corner man and safety respectively widen their field of attention through the on-side end and tackle to both of the remaining deep backs. A more comprehensive picture is thus gained by the defensive backs. The initial movement of the offensive end and tackle determine run or pass, and the motion of the deep backs determines the direction of the play and the appropriate secondary coverage.

This illustration has been perhaps a bit oversimplified, but very often it's just this type of simple adjustment to game situations that leads a team to success.



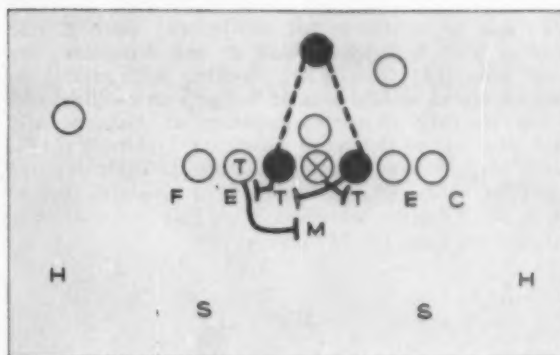
Diag. 4, practical reading situation from a pre-rotated alignment (Charlie Winner, Colts)

Another practical reading situation is illustrated from a pre-rotated alignment in **Diag. 4**. Although the reading technique here is almost identical to that discussed earlier (**Diag. 3**), the basic objectives are somewhat different, and for this reason is presented for analysis.

In a pre-revolved coverage such as this, frequently no attempt to re-rotate will be made. Rather, the defensive corner back will try to determine run or pass and then play the situation accordingly. From his position relatively near the line of scrimmage, he'll be asked to do one of two things. Either he'll drive into the offensive backfield to maintain outside leverage on a running threat to his side, or he'll drop off slightly as a pass defender in the flat zone.

Again from this alignment his peripheral vision is called upon to determine exactly the type of play that his offensive opponent is executing. The coaching point here is to develop in your defensive players a conditioned response to various forms of offensive play. Each player is to read a meaningful picture from the initial moves of the offensive team. It's a team reaction to these visual patterns that develops a sound total team defense.

Paul Bixler, defensive coach of the Cleveland Browns, relates how many of the pro teams are also inaugurating a technique for inside reading, **Diag. 5**. Here the primary target of attention falls upon a



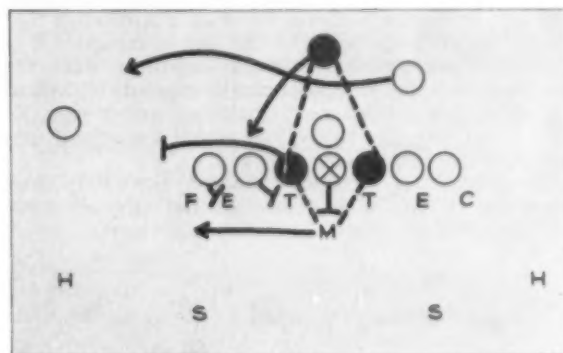
Diag. 5, reading triangle for middle linebacker (Paul Bixler, Browns)

triangle composed of the two offensive guards and the offensive fullback. The concern on this reading assignment is to determine the trap type of pattern so that a defensive adjustment can be made.

Usually any crossing motion by center and guard (**Diag. 5**), coupled with influence blocking technique, will clue the middle linebacker to advance sharply to prevent lateral pressure from the offensive tackle. The reading triangle for the middle linebacker also includes the fullback, because he's the most likely running threat between the offensive guards.

Actually the middle linebacker has a real job developing a specific response to each form of blocking technique. But once a definite response is triggered to each pattern, his defensive reactions are much more sound than they'd be had they been developed around a single key only.

If the center fires out to block aggressively while either of the guards pull to the outside, there's a good possibility that a fullback threat off tackle is developing. Now the linebacker must read this potential and pursue on his own side of the ball to the point of attack, **Diag. 6**.



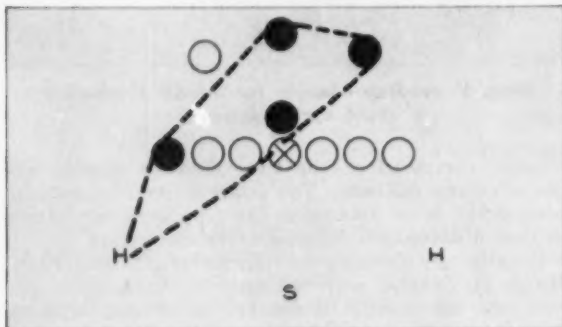
Diag. 6, linebacker reading when center fires out and guard pulls (Paul Bixler, Browns)

The combinations of reading patterns the linebacker must learn to recognize can grow numerically, depending upon the type of offense employed. However, there's a good deal of duplication within the initial movements of these patterns, and before long several basic synchronized movements stand out as definite reading keys. It's these basic moves that form the foundation of offensive reading.

Soon, definite and specific reactions are conditioned: (1) If there's crossing motion on the line and the fullback comes, prepare to meet the trap play; (2) One

guard pulls wide, fullback slants in the same direction—pursue to meet him off tackle; (3) Both guards pulling with fullback motion in one direction—key wide play; (4) Guards set blocking with center on line earmarks either pass or fullback draw play, etc.

Hal Herring, defensive tactician at Auburn, says that their entire defensive secondary system is predicated on offensive reading technique. Their reading objective is first to determine run or pass and then to establish offensive backfield flow and corresponding defensive moves accordingly.



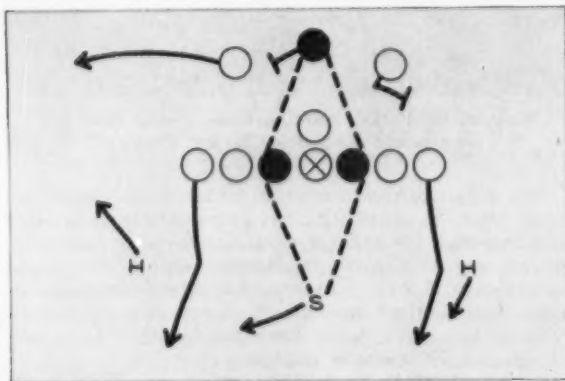
Diag. 7, reading opposite triangles
(Hal Herring, Auburn)

The Auburn system is one of reading opposite triangles, **Diag. 7**. Notice that the left defensive halfback reads his key through the offensive end to a triangle composed of the quarterback, fullback, and far halfback. This cross-key to the opposite triangle will help him establish offensive backfield flow, while the near end will help to key run or pass.

If both of the deep backs of the far triangle come toward him, he becomes the strong side and covers the near halfback on all pass plays. However, if the near end releases downfield and the deep backs of the triangle remain on their own side of the ball, the left defensive halfback becomes a weak-side defender and is responsible for the end to his side.

In determining what factors constitute offensive backfield flow, the halfbacks employ the rule of thumb. (If either the fullback or far halfback comes over the ball to his side, the halfbacks become the strong side and rotation comes their way.)

To synchronize secondary rotation, the safety man reads his defensive key through the two offensive

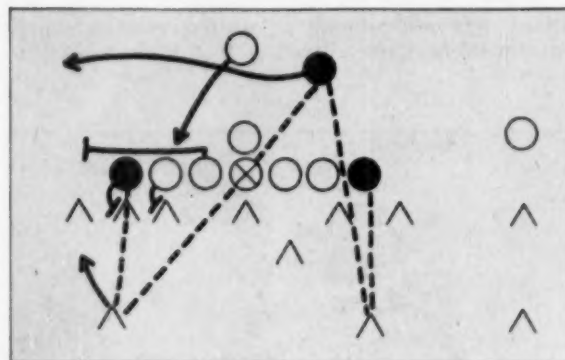


Diag. 8, S reading through offensive guards to FB
(Hal Herring, Auburn)

guards to the fullback, **Diag. 8**. Again passive blocking by the guards on the line of scrimmage keys pass, and the initial movement of the fullback to either side keys defensive rotation. If the fullback remains along the midline of the ball, there's a good possibility that a draw play will develop and the safety man prepares to come up quickly.

Although there appears to be a great deal of uniformity in regard to the reading assignments of the corner men on the "Oklahoma" or "nine man" defense, there seems to be quite a bit of variation as to the techniques employed by the safety men of the same alignment.

During a recent lecture on defensive play, Cliff Speegle of Oklahoma State outlined how he employed reading from the defensive twin safety positions. At Oklahoma State, the safeties' field of vision encompasses both the on-side end and near halfback, **Diag. 9**. In the case of a rotated backfield (**Diag. 9**), the safety man reads the near side end and the far halfback.



Diag. 9, S's reading on-side end and near HB
(Cliff Speegle, Oklahoma State)

In both situations the halfback remaining in the backfield and one of the offensive ends become the primary reading targets. The reaction rule here is elementary. If you read halfback motion toward you together with end blocking motion, you can prepare to release and support a running threat from inside-out. If, however, the end to your side releases downfield, synchronized halfback motion will determine appropriate secondary coverage.

This form of reading has become almost universal among college teams throughout the country. It's a sound practice that requires coaching on the highest level, but also one that can reap great rewards to those teams who've mastered the necessary skills.

John Yovicsin at Harvard uses a reading technique not unlike Coach Speegle's. However, his near triangle method includes the on-side tackle as well as the near end and halfback respectively, **Diag. 10**.

The reading idea here again is relatively simple. Each player of the near triangle represents the key to a primary threat. As the offensive play unfolds, the combined movements of these three players should key the defending secondary as to what type of play has been called. Actually each corner of the triangle in itself is an individual key. But the real secret to reading technique isn't to read three specific keys in turn, but rather to gain a meaningful picture from the synchronized movements of all three corners.

If your safety man was to key the individual corners of this triangle, it wouldn't be difficult for him to isolate each of the basic threats in turn. The end has always been the basic key for the running game.

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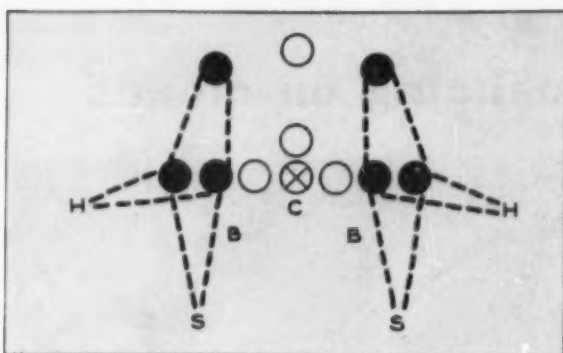
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Diag. 10, reading near triangle, including on-side T
(John Yovicsin, Harvard)

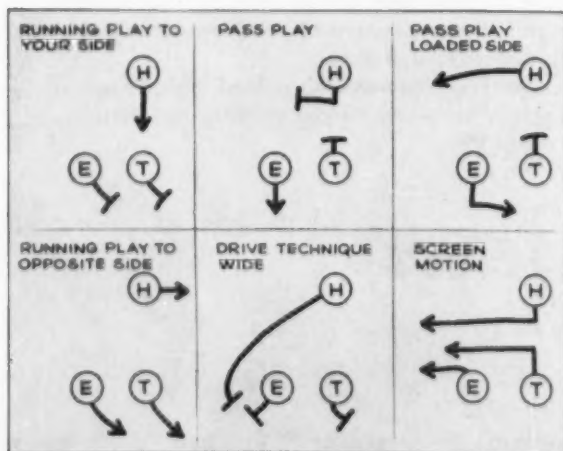
If he blocks, there's a strong possibility that a running threat is intended opposite the pressure of his block.

Also, we can assume that the tackle is a reliable key to the passing game. (It's rare indeed to find him occupying his time with anything other than pass blocking during pass plays.) In the remaining corner of the triangle, the halfback keys the direction of the play; he can tell you not only in what direction the play is intended, but also can help you determine the loaded side of any pass pattern.

After reading this last bit of testimony, you might perhaps logically ask, "If my defensive backs can isolate all of this information with the help of three individual offensive keys, then why should I bother to teach them the fundamentals of reading at all?" Although the thinking here is primarily sound, it does break down under closer observation as the real answer lies hidden in the element of time.

Football today is a game of speed. Teams speed into the huddle, speed out of the huddle, and then speed off their marks. The idea of racehorse football has completely changed many of our ideas of defensive football. We can no longer ask defensive backs to wade through the task of deciphering the results of three separate or individually different keys. Rather, through a system of categorizing the various pattern combinations, they must condition themselves to react spontaneously to each of the various combinations.

Some of the possible offensive patterns for the Harvard reading triangle are shown in **Diag. 11**. Each

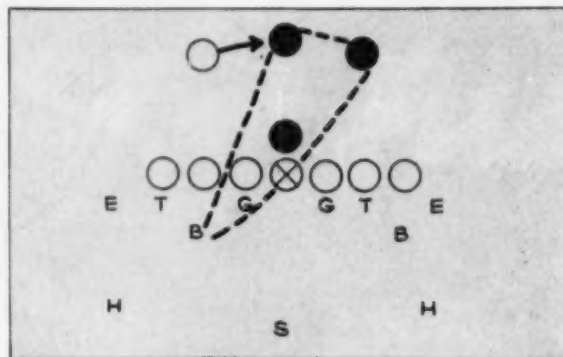


Diag. 11, possible offensive patterns for the
Harvard reading triangle

of these can be used as a guide for skeleton defensive units.

Although offensive reading is used more today in the professional ranks, it's also growing in popularity among many collegiate teams. Much of the reading formula is intricate indeed, but there are various areas of it that could well be adapted to any level of football.

John Green of Tulane University recently remarked about such an innovation. It's as simple as it sounds, and could very well be the stimulus that many of us need to incorporate more of the reading technique into our defensive thinking.



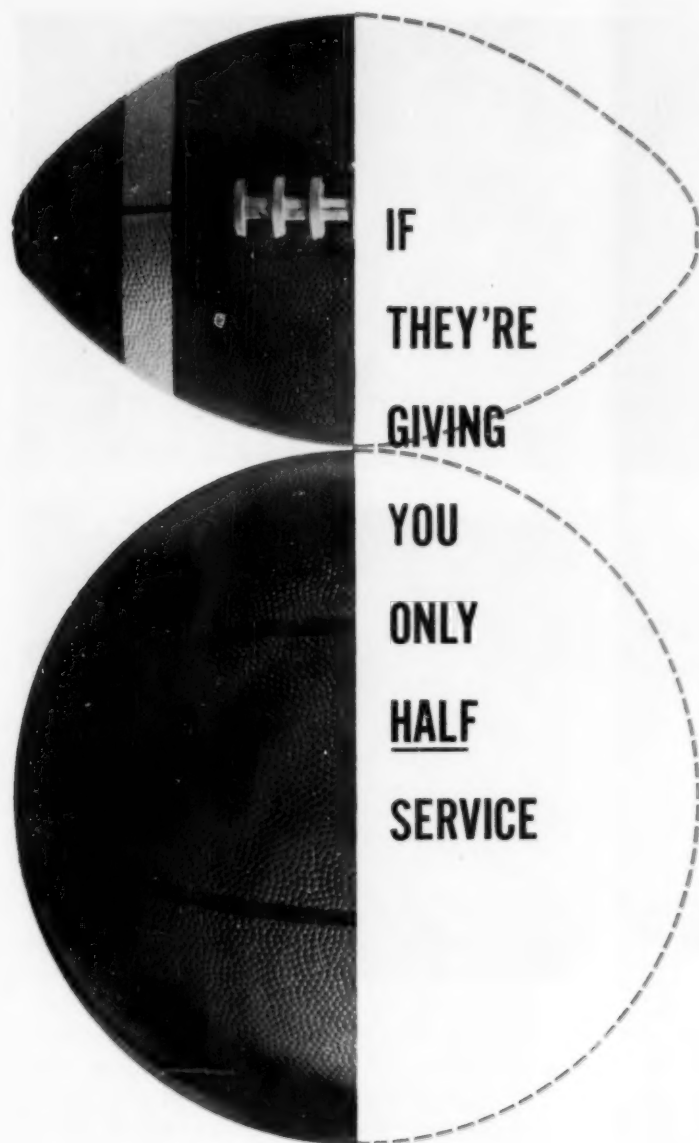
Diag. 12, reading through line to opposite backfield
triangle (John Green, Tulane)

Usually the wide-tackle six defense rests the responsibilities for counter and reverse plays on the weak-side linebackers. It's their assignment to pursue running plays to the opposite side of the field only after they've systematically ruled out any threat in their immediate area of responsibility. To do this, each linebacker reads through the line to the opposite backfield triangle, **Diag. 12**. If any combination of these three backs comes his way, he must stay at home leaving the task of pursuit to his teammates.

The reading technique is illustrated here in its simplest form. The linebacker reads pattern. If all three corners of the triangle move away from him, he's free to pursue. If either or all come his way, he must remain at home. This is surely a most practical method for determining offensive backfield potential. It needn't be labored on the drill field and will be received with enthusiasm by your players.

Offensive reading per se isn't a new technique. However, many of the recent innovations are new and have the defensive minds turning all over again. By the looks of things, reading is here to stay. This game of football with all of its intricacies is getting ever more complex.

One of the brightest young coaches in the game, John N. Hooper hails from Upsala College (N.J.), where he was voted the school's outstanding athlete in both 1949 and 1950. He won the Lollo Award for track in 1950 and '51 and was chosen the most valuable all-around lineman for 1949 by the coaching staff. After coaching his alma mater for five years (1953-57), he put in one year at Wayne Township (N.J.) High before being tapped by Al Kelley at Colgate. This marks his fifth article since 1956. Previous "winners" have been: "Keying from the Corners of the Umbrella Defense", "Diversify the Split T with an Inside and Outside Ride Series", "Influence Blocking", and "Three Extra Coaching Aids for Your Split T Option Play".



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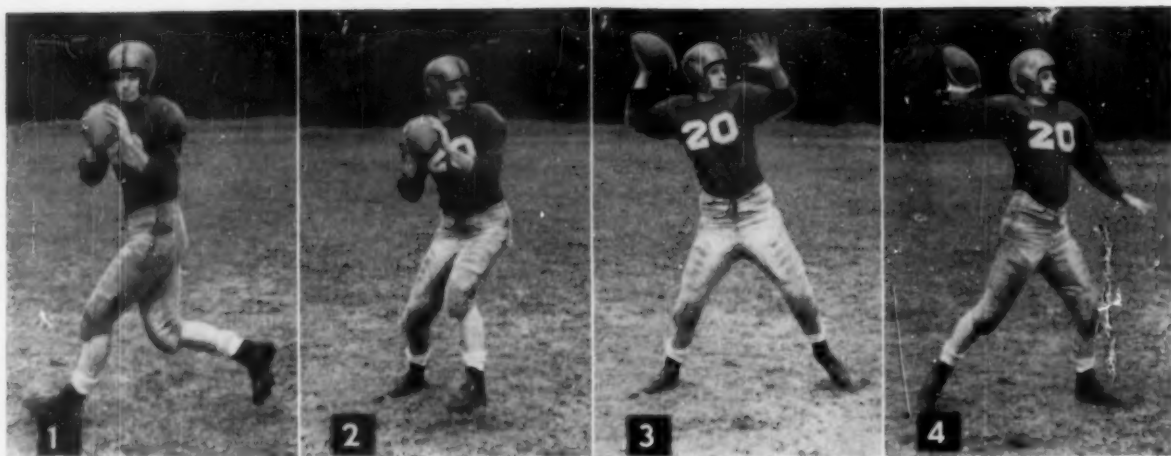
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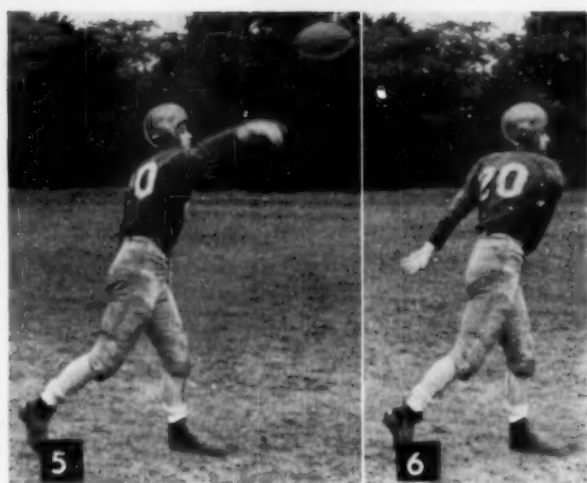
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By JOE STANCZYK

Asst. Coach, Rutgers University

Passing Mechanics



IN ACTUAL practice, forward passing is a synthesis of several basic movements executed in a smooth, flowing motion requiring the ultimate in coordination and timing. The passer must necessarily think of it as a *single* coordinated hand, eye, body, and leg action, and not as a series of individual techniques.

For pedagogical purposes, however, the technique must be broken down into its component parts, analyzed step by step, and then put together into the coordinated whole.

The fundamentals most important in passing include:

1. Reception of ball from center.
2. Maneuvering to passing position or pocket.
3. Mechanics, namely: ball grip, position of ball and arm prior to start of pass, body alignment, split-visibility, target area, delivery of ball, and post pass action.

We're principally concerned with passing from the #4 spot in the Single

Wing. The #4 back lines up with his right foot on the ball at a depth of four and a half yards. Eyes are on the ball, feet comfortably spread, weight on the balls of the feet with the rear cleats barely touching the ground. The knees are flexed to an "explosively comfortable" degree. In order to move, you must have some uncoil available in the knees.

The hands are on the knees, thumbs to the inside, with slight downward pressure exerted so that they may be used to aid in your forward or lateral movement. The shoulders should be slightly ahead of the knees with the center of gravity over the legs.

In both the 40 and 70 pass, the center delivers the ball to a spot approximately 18 inches off the right hip.

In the 70 pass, the ball is delivered slightly above the hip, since this is only a two-step maneuver and a drop to the pocket.

In the 40 pass, the ball is delivered directly off the inside hip with an appropriate lead. This is a four-step maneuver and should appear as a run at its inception.

The depth of the passer's position

in the pocket depends on the type of pass being thrown. The 70 pass is thrown from a depth of 5-6 yards; 40 pass from a depth of 6-7 yards.

MANEUVERING TO PASSING POSITION

The ball is caught with the thumbs to the inside. Anticipate the count and initiate your first "direction step." Permit the ball to be cushioned into your hands by drawing the hands back on contact. *Keep your eyes on the ball and look it in.*

As you get the ball, start fixing it in your hand to the desired grip so that when you get back into your pocket you're prepared to throw. "Feel" the ball into the desired grip.

Make your maneuver look like the inception of a run. Disguise your intention to pass as much as possible. Getting back to your "pocket" is very important because the quicker you get back, the sooner you'll be able to get set, look over the field, and throw.

Get back quickly yet under control so that you can have that moment to relax before you throw. There must be sufficient time to gather yourself.

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Be cool, keep your poise, and possess utmost confidence in yourself, your receivers, and the men protecting you in the pocket. Stay in your "pocket" unless forced out.

MECHANICS OF PASSING

Ball Grip:

Grip the ball at the laces with "fingertip" control, leaving some daylight between the palm and the ball. Grip the rear half of the ball. This varies with the individual. You'll find that the index finger and the thumb are the only fingers not in contact with the laces. Many good passers throw with the last two fingers on the laces.

The index finger is laid on the ball in a natural position. This appendage is the "guide" and the last to leave the ball. The thumb is placed in a natural position on the ball, giving lateral support to the upper portion of the grip. It's essentially the underside support of the ball, and it's important that the angle between the index finger and the thumb be such that you have a *secure hold* on the ball without too much tension.

How should the ball be aligned in your hand now that you've gripped it? With the wrist held straight, the ball should appear to be perpendicular to the wrist. As I said before, this may vary with each passer depending on the tilt of the ball. The ball should either be perpendicular or tilted up, but never pointed down.

Position of Ball and Arm prior to start of pass:

You're now in your pocket prepared to throw. You know your pass pattern as well as the abilities of your receivers. You know where your protection is located. You're poised, confident, and alert.

The ball is in a preparatory passing position opposite the right ear, directly over the shoulder or slightly to its outside. It's supported by the left hand which is placed lightly on the front and side of the ball. It serves as a support, keeps some tension off the right hand, helps keep the ball in the up or preparatory position, and sometimes acts as a "faking shield" into which the passer fakes the ball in one direction, withdraws it, and then throws elsewhere.

The upper part of the arm should be parallel to the ground. The wrist is straight. Normally the front of the ball will be turned out slightly.

If the pass is to be a long one, then the ball is brought back behind the shoulder more in order to increase the force and distance of the throw. The body weight is shifted slightly more to the rear, with a flexion of the right knee, so that the passer may better be able to "gather" himself for the longer throw.

The common mistake is to bring the ball either in behind the head or too far behind the shoulder. This destroys the direction and coordination of the throw. The angle of uncoil should never be greater than 45° from the start of the throw to the release point of the ball.

Body Alignment:

The feet should be comfortably spread with the weight equally distributed. The knees are slightly flexed, which anatomically is translated into the same relative flexion at the ankles. This flexion is important from the standpoint of relaxation, balance, and mobility.

The rear foot is planted approximately parallel to the line of scrimmage, with the front foot at a 30° angle—placing the body in a position similar to that of a pitcher with a man on first base. This places the upper part of the body on the same angle with the front foot.

Thus you're prepared to throw to any sector of the field with a proper directional movement of the front foot toward the respective receiver and a compensatory pivot of the rear foot. The rear foot shuffles forward to maintain balance.

The body must be in balance at all times.

Split Vision:

All good passers possess the attribute of "split-vision" either innately or through experience. It's the ability to see the entire field before you, all receivers and potential harassers simultaneously, and then react accordingly.

The passer reacts by either hitting the primary receiver, faking the secondary receiver and hitting the primary receiver, or vice versa; stepping up into his pocket or retreating to a deeper position; rolling to one side or the other; running with the ball; "eating" it or throwing it away legally, either out of bounds or in the vicinity of a potential receiver.

SPLIT-VISION PRIMARY FACTOR

The ultimate choice isn't entirely determined by split-vision alone, yet it's a primary factor. If a passer didn't utilize split-vision, he wouldn't have the choices, good or bad, at his disposal. Reflex action plays an important part. Yet if you didn't have the primary factor, I'm certain you would accomplish very little as a passer. There's a close correlation between the two.

The two factors play an important part in the passing game. No passer is worth his salt who can't hold on to the ball until the last split-second and then make his decision. Many a pass is completed a split-second before the passer is hit and tackled.

Target Area:

In selecting your target or receiver, proper placement and lead is very important. A hook pass should never be intercepted. Throw it at the receiver's chest. If a defender is at the same depth with the hook man to either side, then you must throw it to the side away from the defender.

Any angle pass requires a lead. This is a matter of judgment and timing, and comes only with practice. If your mechanics are good, then it's just a matter of time before you start hitting.

If the defensive man gets an angle on the receiver to the outside, then

the ball must either be thrown at the hip of the receiver or thrown out of bounds.

If the defender is inside, then the receiver should be given the normal lead.

If the defender is deep, then the ball must be thrown up-field rather than down. In other words, it should be flattened out to the receiver. If the receiver is clever, he'll stop on this pattern or ask for a stop pass the next time up.

Your alternatives to all this are to throw to your secondary receiver, "eat the ball", run with it, or legally throw it away.

The long pass requires greater trajectory and a good arm. Always give the receiver an opportunity to get underneath the ball.

WRIST IS VITAL FACTOR

In the short passing game, the wrist is more involved than the arm. Your arm gives direction and follow through on these passes. It must be a snap throw in order to get to the receiver quickly and promptly.

Delivery of the Ball:

You've been taken step by step from the reception of the ball from center to your passing pocket, into the rudiments of body position and balance, and utilization of split-vision. We're now prepared to discuss the throwing act itself.

We have to agree that each and every passer will pass differently in terms of mechanical execution. Individual differences must be taken into consideration, but the important thing is to have a starting point from which to work.

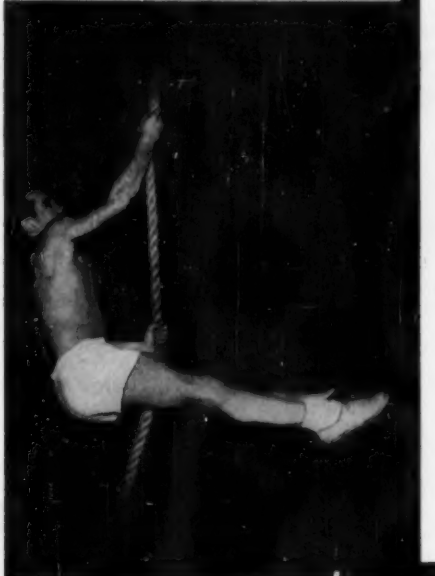
Let's assume we're in our 40 Pass pocket. Our right end has decoyed through the safety and the wingback has released in the direction of the strong defensive halfback, angling to a spot 10 yards downfield in front of you, and then hooking. You're now in a direct line with the receiver.

You must first of all anticipate your throw so that the receiver gets the ball as he makes his hook. You can't wait until he completes his maneuver to start throwing the ball. He may be covered by that time.

You have anticipated your throw perfectly. The ball is in its "preparatory" position. Just as you start your throw, the left hand comes off the ball and remains flexed and extended out from your left shoulder for the purpose of balance.

As the left hand comes off, you're in the first phase of your throw. The throwing arm and hand start forward in the direction of your target area or receiver. The upper arm is parallel to the ground and the elbow starts forward as the lower arm and hand uncoil and start forward. I always like to think of the elbow as part of the throwing hand, since both should be aimed at the receiver.

As the position of the ball, held in the hand, approaches a point almost



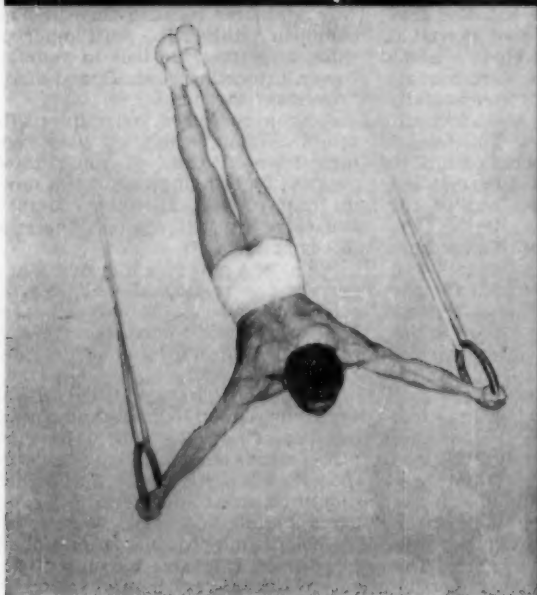
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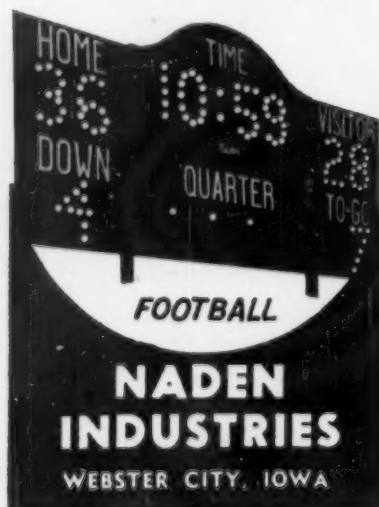


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over the "leading" elbow, the release is initiated and the elbow becomes a part of the follow-through. Keeping the elbow up and following through will help keep the ball up where it belongs in its flight to the target area and will aid in keeping the wrist in proper alignment.

The hand now takes over the final direction of the ball. It should be released at the highest point of the arc, with the wrist straight, which means that the back of the hand is facing outward. I must emphasize that the wrist must be straight but not rigid. Avoid turning the wrist. Think in terms of throwing your hand at the receiver. You must follow through to your target.

The ball rolls off the fingertips with the index finger or "guide finger" being the last to leave the ball. Once the ball is released and the follow through executed, then and only then does the hand and wrist turn so that the palm of the hand faces downward. If you're habitually turning the wrist to the inside, I'd suggest that you go to the other extreme and turn it the other way to overcome this bad technique.

In the preparatory position, the trunk is at the same angle as the left foot, as stated earlier. As the throwing act is initiated, the trunk rotates with the action of the arm. The trunk comes around slightly ahead of the arm action so that as the ball is released at the target, the trunk is approximately parallel to or facing the receiver.

This action of the arm and trunk is just another phase of the entire co-ordinated passing act. The left arm travels in its normal orbit with the turning of the trunk and the shoulders. The hips are a vital part of this movement.

ROLE OF LEGS AND FEET

We next come to the legs and feet. You have a "direction" foot as well as a "direction" hand and elbow. As the throw starts, you also start moving the front foot forward. You actually slide forward with the front foot, directing it at the target. You take a normal step forward, being careful to maintain balance and not over-stride. You throw *through and against* the front leg.

This is very important. It's used not only as a "direction indicator" but also as a brake, so to speak, for the rest of your body as it uncoils from heel to head. The rear foot glides forward in a normal way as part of the follow-through, as well as to maintain proper balance.

The forward planting of the foot and the release of the ball must be a simultaneous act. You must not step and then throw or throw and then step. The planting should be on the ball of the foot. By the same token the same dire results will occur if you over-stride or under-stride. The weight of the body *should not* be thrown beyond the front leg.

AFTER an illustrious career in the Columbia University backfield, Joe Stanczyk coached most successfully in the high school ranks before being called back to his alma mater by Lou Little. A marvelous technician, who ranks with the greatest in the country, Joe served the great Lou long and distinguishably before moving to Rutgers University several seasons ago.

I want to say a few more words about balance as it concerns the shifting of the weight as the throwing act is started. We talked about the weight being equally distributed. As the throw starts, your weight is shifted or transferred from the rear foot to the front foot—to the ball of the front foot and not the heel. This prevents over-striding. You can't be a good passer if you throw off the rear foot or the front foot. You must throw *through and against* the front foot and leg.

We've talked about the throwing act when the receiver is directly in front of us. The same mechanics apply when the target area is moved to the left or right from the standpoint of our preparatory position. Your throwing angle changes now but the mechanics of the feet, body, and arm do not. The front foot is still the "direction foot." The thing you must avoid is throwing across the body. This means that you simply must bring your "direction foot" around in proper alignment with your target.

Post Pass Action:

After throwing the ball, you must think in terms of protecting yourself and then covering the pass in case of an interception. You progress from one phase to the other in a well-organized manner. Guard against half-way measures because then you accomplish nothing. The most important thing is getting the ball to your receiver, protecting yourself, and finally "covering" the pass.

As you complete your throw, the follow-through will bring your right arm down in front of you. Protect yourself by bringing both hands down in front of you, disengage yourself, and move out in the proper direction to cover.

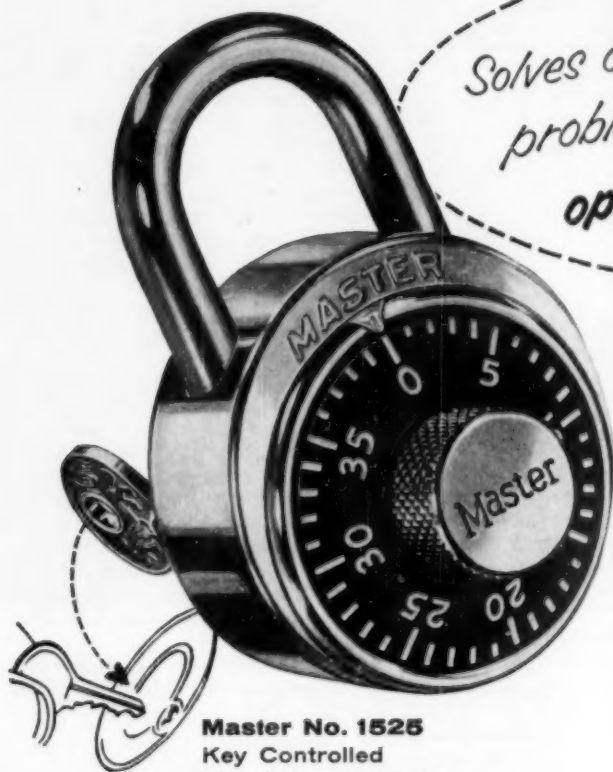
We have a new rule this year which permits the release of ineligible receivers as soon as the ball is *passed*. Last year ineligible receivers had to remain in the neutral zone until the ball was *touched*.

This simply means that in order to utilize these men to greater advantage for "covering" the pass, we must place more emphasis on the word "cover" when we release the ball. It should be repeated several times and made audible enough so that we can get help in the proper area as quickly as possible. Offensive pursuits of this nature can be very helpful in case of a completed pass or interception.

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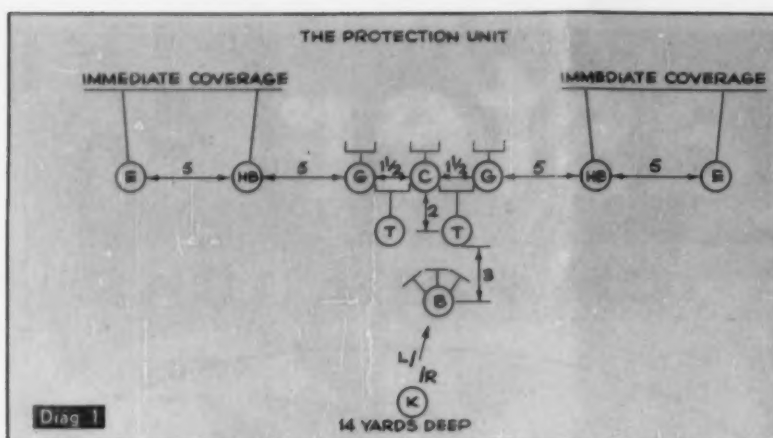
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Semi-Spread Punt Formation

OFFENSIVE football has seen a trend toward the multiple style of attack, complete with flankers, slot backs, and an increasing use of the forward pass. To combat these styles of attack, coaches now teach a complexity of defenses, including the most popular stunts from these alignments.

All too frequently, a team's punt formation remains static. It's allotted only a minimum of practice time in order to allow time to teach the offensive and defensive patterns. Yet, used as a weapon in itself, the punt can be as valuable as the strongest offensive play or the most impenetrable defense.

The punt should be an integral part of the system and should be practiced as such with the thought and purpose of preventing the all too common blocked kick or long runback.

Because kicking plays such an important role in the winning or losing of a game, why not modernize the formation, as many teams are now doing, in order to use it to better advantage? The semi-spread punting formation described here has been very successful, for it's a relatively simple formation to teach and doesn't require great speed or

ability. We offer it as a possible answer to the problem described above.

In selecting any kicking formation, it's imperative to provide for both ample protection for the kicker and maximum coverage for the return. The alignment indicated in **Diag. 1** provides for both these necessities to the extent that in its three years of use we've never had a kick blocked or a runback of over 12 yards.

We've found that it's more advantageous to align the punt formation from the defensive personnel rather than from the offensive. This is important for several reasons.

First, it makes it possible to practice both units at the same time.

Second, it means that the kicking team will enter the game rested and will do a better job at coverage than a team that has been working offensively for several series of downs.

Third, punt coverage utilizes more defensive fundamentals than offensive fundamentals and the defensive unit is likely to be more adept at tackling and pursuit.

Finally, it will permit the defensive team to be immediately in position for a quick offensive lineup by the opponent.

Personnel should be placed into

the formation according to the required job, and not by their offensive or defensive position. Protection rules by position are as follows:

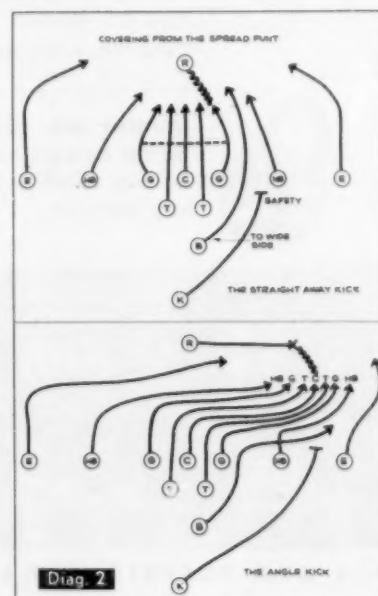
Center: The key to the success of this formation lies with this man. His ability to get the ball back 14 yards to the kicker with a fair degree of speed and accuracy can only depend on the time he practices this skill. Practice with the kicker must be a daily routine for the center, and it's best to stipulate the number of passes that he makes each day.

We have the center grasp the ball as far out in front of him as his reach will permit and drive the ball back as forcibly as possible. The follow-through should carry his arms against the inside of his thighs and his fingers should point toward the kicker on release.

A short four-inch jump backward with both feet as the snap is being made will add force to the ball's flight and also put the center in a better blocking position. The center's blocking assignment is to take the man head-up or the man on either side closer to the ball.

As it is the case with all the men responsible for protection, the center "area blocks," and he must be careful not to leave his area in order to execute his block. If no one enters his area, he releases downfield after three counts.

The Guards station themselves 1 1/2 yards on either side of the center



By **HOWARD ANDERSON**, Coach, Summit (N. J.) High School

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and block the man head-on or the first man to his outside, remembering to force the defensive man to the outside. The guards must be careful not to follow a defensive man who's lined up completely outside them. Good blockers are necessary in this slot as protection is their primary concern.

The Tackles, or any two fairly proficient blockers, line up 2 yards deep in the backfield in the split made by the center and guards. On the snap they step up into the holes and take anyone coming through. The tackles wait until the sound of the kick before releasing downfield.

By pulling the tackles back and placing the halfbacks on the line, you've strengthened the blocking of the protection unit and also added speed to the coverage. In high school we've also found that the halfback will be the better open-field tackler.

The Blocking Back stations himself 3 yards behind the tackle on his right and blocks the first man breaking through whether he be on the right or left. This man should be instructed not to back up as he executes his block as he may interfere with the action of the kicker.

He also must not leave his blocking area, which is $1\frac{1}{2}$ yards to either side. For a left-footed kicker, this man will line up on the kicker's left.

The Kicker is lined up 14 yards deep directly behind the center and should work toward perfecting a high kick permitting maximum coverage. He should use only two steps and should meet the ball as it comes back instead of waiting for it to reach his hands before starting his steps.

Through practice during the week, the kicker must be prepared for a bad center and must get in front of the snap instead of reaching to either side for it. During practice it's a good idea to give the kickers five or six bad passes so that they may work on getting in front of the ball and still get the kick away with a fair amount of speed.

The kicker receives the ball with his hands outstretched and his body slightly bent forward. Besides the blocking back, the kicker is the only man in this formation who's in an upright position. The other members of the unit assume a normal three-point stance.

Preliminary Coverage Unit: This four-man unit consisting of the ends and halfbacks, or any four of the fastest, most adept tacklers, lines up on the line 5 yards apart and 5 yards from the guards. They have no protection responsibility and release immediately upon the snap.

To prevent being offside, they must look in at the ball and leave

on the movement of the ball and not on the number that sometimes cannot be heard from this distance away. If the ball is on an inbounds mark, the two men on the short side of the field will shorten their splits to 4 yards, and the men on the wide side will widen their splits to 6 yards.

The paths of coverage for all members of the kicking team, indicated in **Diag. 2**, require repeated practice. Responsibility for the outside lies with the ends. Upon release they must make a slight arc to the outside in order to establish the outside angle. They must approach the receiver from the outside and cannot let him get to the outside. Naturally, all the men going downfield must shoot a quick glance over their inside shoulder to determine the position of the kick and then adjust their path to it. The halfbacks go directly for the ball and should attempt to keep the receiver directly in front of them.

When their protection job has been completed, the tackles, guards, and center go directly for the ball, maintaining their original spacing as they head downfield. In the event the kick goes off to one side, the linemen must vary their path so as to stay on the same side of the ball as their original position dictates.

The blocking back goes directly for the ball, favoring the wide side of the field as the threat of a long runback lies here. The kicker acts as the safety and should flow with the play, making the tackle only as a last resort.

There are several drills which are very helpful in practicing this particular phase of football. To simulate an attempted punt block by an opponent, overload the defensive line with 10 to 12 men, giving them the option of crossing, looping, or any maneuver designed to fool the protection unit. This type of rush will test the protection and indicate the possible areas of weakness.

To make the drill more interesting, add one more defensive man to the line each time the kick is gotten away and actually see what is the maximum number of men that the protection unit can successfully hold out.

To practice coverage the "Obstacle Drill" is very useful. For this drill, scatter all the blocking dummies from the line of scrimmage to the intended receiver. Also station a man in front of each of the seven men on the line of scrimmage.

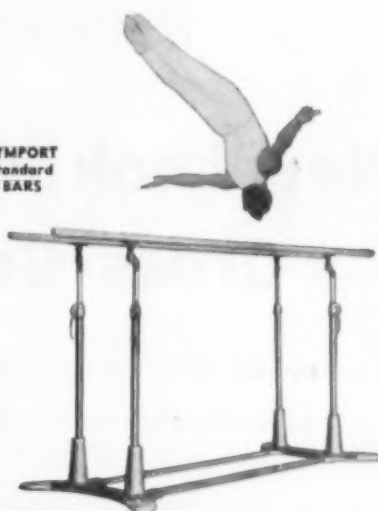
On the snap the kicking team must avoid the efforts of the defensive men to delay their release and get downfield and tag the receiver. They must avoid the dummies and

(Continued on page 68)

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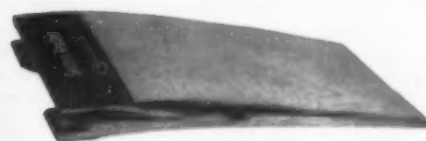


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New Look at Cross-Country Training

*A combination of Fartlek and interval training
offers effective results in distance running*

ONE of the most impressive features of high school cross-country running in Massachusetts during the past four or five years has been the regularity with which course records in all classes have been dropping. Even more impressive has been the fact that usually the existing course records have been smashed not by one boy but by five to ten boys in some meets.

A closer study of these results reveals some changing attitudes toward cross-country training that may well boost the U. S. into a more challenging position among the world's leaders in distance running. The new trend in training may not make us a tremendous distance threat in the 1960 Olympics, but it may have a trenchant effect by the 1964 Games.

Whether you're primarily interested in developing outstanding high school milers or outstanding high school cross-country teams, you must understand that the two are nearer alike than coaches in the past were inclined to believe. The old idea that certain boys were too slow for the mile but fine for cross-country racing of two or three miles is now being questioned.

The idea that a miler lacked endurance for the longer distance has been fading as coaches find evidence that the overload principle of training works wonders in building up that endurance. By the same token, the boy with endurance is being trained to carry speed by means of a judicious program of paced 440's and 220's. A boy who carries out a well-regulated training program based mainly upon repetitions of moderate quarter-miles in fairly large numbers will find himself running outstanding cross-country races by the time the championship meets roll around.

Coaches studying the Swedish training program of Fartlek and the

methods of such great coaches as Stampfl and Cerutti may be somewhat confused by the seemingly wide differences between them. The confusion may be intensified by the fact that some of the greatest distance runners in the world have been produced by each method.

It seems to me, however, that both the Swedish program and the overload program have certain basic things in common. Someone may be quick to point out that Fartlek stresses training on grassy areas with very infrequent use of the cinder track. But you should notice that this training off the track is being recommended more and more by the adherents of the "increased stress" method.

Coaches following the latter plan are likely to suggest that an accurately measured distance should be laid out on a grassy surface rather than have the athlete merely run a certain length of time over a grassy area.

Perhaps it's true that the Swedish style of training stresses more the idea of running for a certain length of time, while the plan based upon increasing stress tends to emphasize running a given distance over and over a fixed pace.

Fartlek does tend toward letting the runner ease up before he begins to feel severe fatigue. But it offsets this to some extent by encouraging the man to start "quick steps" or short sprints after only a brief recovery time during which the runner is jogging.

It seems to me that the Swedish idea isn't vastly different from the overload method in this respect. The fact that a boy is told to run for an hour or so at varying speeds all the way from hard miles, repeated short sprints, fast running up hills to easy jogs for short intervals isn't too different from the "increased stress" method. Indeed, it may well be in-

corporated into that plan as a regular part of it, just as repetitions of 70-, 65-, or 60-second quarters may be equally valuable as a part of the Fartlek plan.

If we're training high school distance runners, we must face the fact that many of them aren't "dedicated" stars. Only a few will be willing to endure the monotony of repeated quarters or halves day after day. The boy with designs upon greatness will face the ordeal; the non-dedicated runner falters under it.

It's for this reason that I see possibilities of combining features of both Fartlek and interval training. I'm convinced that the best short term results will come from interval training. But I feel that if a long range goal is established, the runner can build himself up over several years by use of Fartlek. If a coach sees a boy with talent in the 9th grade, he may do himself and the boy a favor by keeping that boy away from the seven-day-a-week grind of repeated 440's, 880's, or the even more sap-draining 220's.

Such a talented boy may well find himself beaten by others who've worked with stiff interval programs until he's matured somewhat. Then after a careful build-up through three years during which the stress has been upon a Fartlek style basic program with occasional interval type work-outs, the boy may be changed to the basic interval training as a senior.

I'm a little concerned about the effects upon a youngster of 14, 15, or 16 who's trying to handle a seven-day-a-week program of interval training. I'm very reluctant to kill a boy's love of running. I'm afraid that the strenuous day-by-day chore of interval training is too much for an immature high school boy who must also do enough studying to prepare for college, and who must sometimes do part time work, too.

When the boy gets to his senior year, he's likely to be about 18 years old and better able physically

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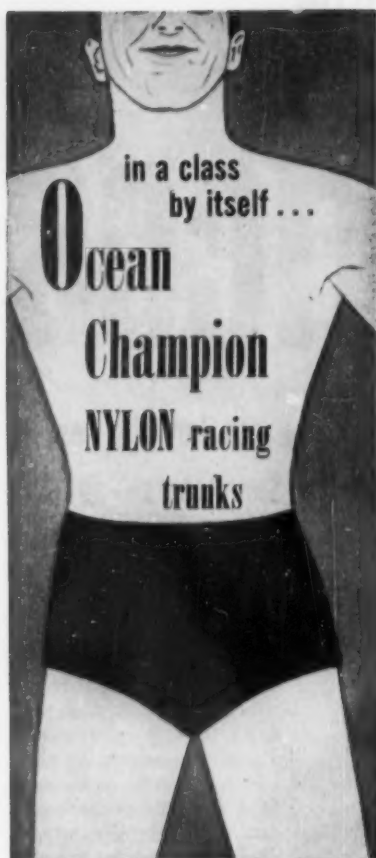
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to cope with the more demanding interval training. Then the coach should be able to map out a training program based upon several months of increased stress intervals.

I'd like to point out that much of the emphasis on interval training has been in connection with its values for the miler. Most high school coaches are faced with the task of getting their milers and half-milers ready for cross-country running. My feeling is that this sport can draw several benefits from Fartlek, even though the coach may be bringing his boys along on a basic schedule of interval training.

It's quite true that a boy training on carefully progressing intervals will do a fine job on the cross-country course. But we run into a paradox. The boy being geared for fine mile performance is on a six to eight month program preparing for his indoor or outdoor miles. He's usually encouraged to run cross-country not so much on a competitive basis as on a basis of fun and relaxation.

I wonder whether a high school runner wouldn't do well to combine his interval training with some Fartlek during the cross-country season. Maybe a diet of three days of each alternating might be worth an experiment.

After some experimenting on my own, I convinced myself that interval training at 220's alone, while definitely effective in developing half-milers, isn't so good in developing milers and cross-country men. I'm interested in the use of 220 intervals in moderation in sharpening the condition of a man during late racing season.

I don't think that great numbers of relatively slow 220's will be effective in the development of cross-country runners in high school. I agree wholeheartedly with Fred Wilt that the boy's repetitions should be about one-fourth of his race. In other words, a miler will be doing his basic work with 440-yard intervals. Though his training will be interspersed with 880's, 220's and $\frac{3}{4}$ miles, he'll be concentrating on the 440 program.

By the same token, I believe that the high school cross-country runner should be concentrating upon 880 intervals with some 440's and some mile repetitions. Once he has completed his cross-country season, I'd change the concentration of effort to the 440's for his indoor and outdoor miles.

As for the time schedule of the intervals at the various distances, I think that the high school boy can be started with 75 second quarters

and 2:45 halves if he has some ability. The number of these to be run should vary with the strength of the individual boy. I'd limit the number of these for the average boy to from five to ten quarters and from four to six halves.

The recovery times allowed should be about five minutes between quarters and about ten minutes between halves. He should be able to complete his work-out, including his warm-up of about 20 minutes and his tapering off of about the same time, within an hour and a half. His basic running should be completed within an hour.

Among the features of Fartlek training, one in particular seems desirable as a part of the regular training of the high school cross-country runner. I refer to the practice of including fast hill work in the training schedule. I'd go a step beyond that and suggest that this phase of practice include some down-hill work as well as hill climbing.

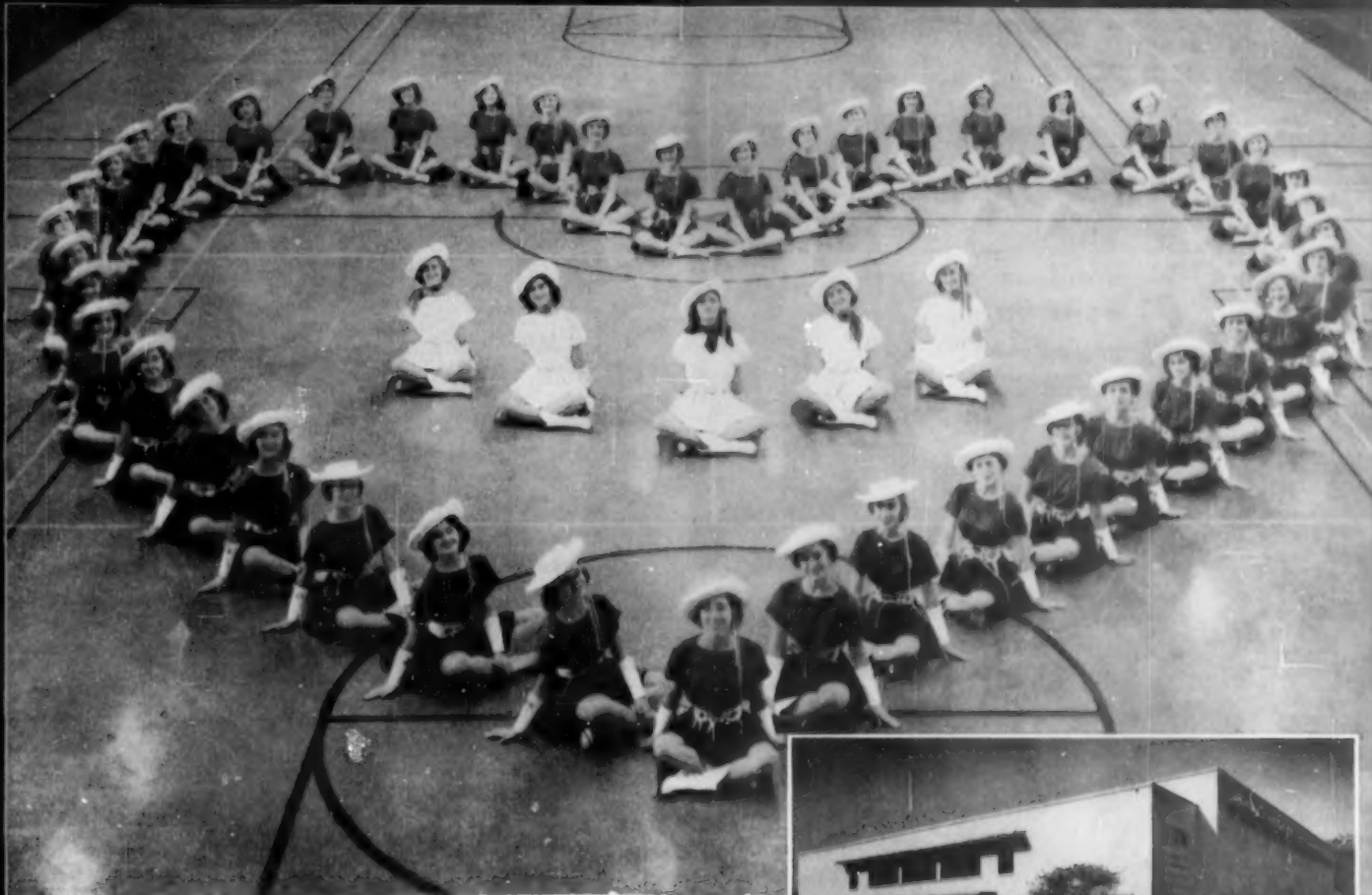
This is one factor in cross-country racing that cannot be handled adequately by a program on the track alone. There are problems of running form involved in running the hills that don't challenge the man on the cinder track. It seems unwise to overlook Fartlek type practice of this nature.

Still another phase of Fartlek training to include in the boy's cross-country training is the running of "quick bursts" of 25 to 50 yards. I'd encourage the inclusion of this feature not only in the boy's training on the track but also as part of his hill-climbing training. A cross-country runner hardened to such practice can gain real psychological advantage by a quick surge past a struggling opponent at the base of an uninviting slope.

As we plan the combination of Fartlek and interval training, we need to consider carefully the periods over which a boy will be assigned a certain timed interval before moving on to the next faster interval. We need to study also the desirable increase in demand for each stage of the training.

I mean we must decide whether, once we assign perhaps eight 75-second 440's, we have the boy continue at this pace for two weeks, three weeks, a month, or how long. We must also decide whether the next stage will be eight 73-second quarters or eight 440's even faster than that. The same decision must be made regarding the 880 intervals demanded.

My feeling is that the various times stressed in the intervals
(Concluded on page 34)



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WHEN Chenango Valley (N. Y.) Central School assigned Mike Durbin the job of head football coach last year, it charged him with the responsibility of developing a sound, forward looking program.

Chenango Valley, which in 1958 entered its third year as a full-fledged junior-senior high school, had initiated football only two seasons before and showed a mediocre 3-11 record. The new school hadn't "shaken itself out" and was still undergoing the birth pains of a rapidly expanding suburban area. A lot of things had to be accomplished in a short span of time to serve the needs of the surrounding communities.

Coach Durbin had started coaching at Blairsville (Pa.) in 1946. One year later he produced the first Class A Western Pennsylvania championship in the school's history!

After spending three years at Blairsville, where he compiled a 27-4 record, he moved on to Hollidaysburg. In nine years he amassed a most impressive record, capped by

the school's first undefeated team in 20 years.

When Mike took over the reins at Chenango Valley, he felt he'd settle for an even break at best. But the material turned out better than anticipated and he turned out an undefeated eleven in his first season—his second in succession at two different schools!

Durbin's 13-year record at three different schools now stands 102-24-3 for an outstanding 80%-plus winning average.

During this period, Durbin had used black-and-white motion pictures to help in his coaching. Black-and-white was used for two reasons: (1) all games were at night and no color film was fast enough to get a properly exposed picture, and (2) the processing service enabled him to get results early the following week.

However, there were many times Mike felt he could have used color movies to better advantage. When the play was at the far end of the field or under rainy, muddy condi-

tions, it became difficult to distinguish players and determine just what was going on. Furthermore, many of the "far end of the field" plays were critical ones, culminating in a score, thus making it imperative for Coach Durbin and his assistants to know whether the assignments were being carried out and to diagnose the areas in need of future correction.

In making arrangements for the 1958 program, he learned that a new color film, Super Anscochrome, had been announced by Ansco. Since this film was available in both Daylight and Tungsten types, coverage of night as well as day games no longer posed a problem.

Of greatest interest was the fact that this film was 10 times faster in speed (Exposure Index 100) than conventional color film. As a consequence, the old problem of late afternoon fall games under failing daylight, or of shooting on dark overcast days was readily overcome. Since the Tungsten type of Super Anscochrome likewise had an Exposure Index of 100, it brought the desirability of night game color movies to reality.

To quote Mike: "Like all coaches, we view the game from the sideline bench and therefore cannot see the spread of play. Since the players on the far side are masked to some



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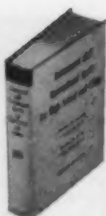
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extent by those closer to us, important action is frequently obscured, especially when the ball is being worked between the 40-yard lines.

"A simple camera tower was built from standard tubular scaffolding to a height of 20 feet. This gave us an excellent angle of view to film the games, making it possible for all of the action to be clearly recorded and later studied.

"Some surprising things were observed when we screened the movies of our first game. Certain players, especially in the line, were found to be carrying out their assignments in much better fashion than was apparent from the sidelines during the pressure of the game.

"This alone helped us screen the first team members on a more factual basis and allowed us to concentrate our coaching efforts on the most promising material. As a result we welded together a more effective team.

"Our boys responded to the movie review sessions with enthusiasm. It was much more effective to be able to point out both the properly executed plays and those that didn't click than to rely on memory or notes."

"No boy is ever convinced completely that the coaching staff's memory is infallible, but there's no question when he sees himself in action. Another great advantage of game films is that they permit our scouts to look over the previous year's film before going out to scout the next opponent.

"We filmed five games in color during my first season here and plan to do more next year. At the end of last season, we compiled several sequences from each game into one master reel of highlights for showing to local booster groups, service clubs, church gatherings, PTA, etc. In a new school system such as ours, there's a very high interest in such a program, and it does wonders for our public relations.

"We also highlight our different defenses and use them for instruction for next year's squad.

"Our game attendance hit a record high and the film costs represented but a small fraction of our nominal admission charges. We felt it was as equally important as other equipment needs. You can always get a couple of interested sports fans to do the camera work free. Our camera work was done by two members of our school's Adult Booster Club, who worked without compensation other than the reward of seeing a fine team go through an unbeaten season.

"Both enjoyed the full confidence

of the coaching staff and were briefed in advance on the type of play we were going to use. As a result, the camera men had the key action in full view in better than 98% of the plays.

"They used a two-inch (50-mm) lens to give very satisfactory coverage of each play, and shot at a frame speed of 24 per second to be projected at 16 for analysis. This affords good economy, permitting a full game to be shot on as little as 600 feet of film.

"No footage was used in following kicks through the air. As soon as the ball cleared the kicker's foot, the camera immediately located the receiver and picked up the action as he received the ball. Of course on passes, the entire action was followed.

"Any coach not presently using movies of his games for team development is overlooking a great working tool. And those coaches who are using black-and-white movies will find their interpretation much more satisfactory and effective if they switch to color film. The new fast color film makes day-or-night good-or-bad weather filming possible."

Greatest advantage, according to Mike, is on a rainy, muddy day. He discovered that in black-and-white it's almost impossible to follow the ball or the key block of the offensive or defensive player, because of the muddy condition of the uniform. But in color film, there's always enough visibility of the color of the jersey to follow the play.

X-Country Training

(Continued from page 30)

should be carried for at least two weeks, preferably three weeks. I lean toward an increased demand of not more than three seconds for quarters and not more than six seconds for halves. I think this phase of the work needs more study and experimentation, especially upon its application to individual runners.

The strength of the runner, his general condition, the state of his health under such temporary handicaps as severe colds, the weather conditions, all of these factors must and should enter into the demands we make upon our candidates.

The training of the boy once he has entered his final weeks of the racing season is a problem that needs special duty. It's a question that involves consideration of the amount of tension a boy can stand week after week as well as of the length of time a boy can sustain top physical condition.

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3. When hit correctly, ball returns near tee. If ball returns to your left, it shows slice; if ball returns to your right, it shows hook. If ball is topped, it will not return, must be retrieved. Regular practice will improve your game.

Dear Coach,

I would like to give you something that you will find useful and recommendable to others. It is called the Jerry Gore "Golfing Gizmo", a boon to golf instructors wishing to teach the use of woods and long irons, but limited due to the large area required. My "Golfing Gizmo" provides the same results as a private driving range and unlike most practice gadgets is a genuine golf ball.

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use, then recommended it to their purchasing departments for school use. The "Golfing Gizmo" is sold through regular retail channels at \$3.95, but on school orders I will sell direct at \$48.00 less 50% per dozen, F.O.B. Palm Springs, California. (Sales tax to be added in states where applicable.)

I am sure you would like to have a sample and I will gladly send you—free of any charge or obligation—my "Golfing Gizmo" so that you can try it yourself. Just fill out the coupon below and drop it in the mail.

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Experimental Research in Football

STANCE • REACTION TIME • CHARGING SPEED
FORCE OF CHARGE • PERCEPTION TRAINING

THOUGH such factors as reaction time, stance, and charging speeds play a vital role in winning football, few coaches have any clearcut knowledge of the latest scientific findings on these components. Lacking objective evidence, they must rely on their own experience and intuition in devising the technical details of their offense and defense.

Recently, however, a number of experimental studies have revealed some trenchant information on these factors, which could suggest possible adjustments in teaching techniques.

Studies on stance, reaction time, charging speed, and force of charge.

Robinson¹³ studied the relationship between stance, starting speed, and

direction of the charge. The three-point stance, two-point-with-feet-parallel stance, and two-point-with-feet-staggered stance were used. The results reported were:

1. No significant differences were found in starting times when starting 90° to the right, 45° to the right and 45° to the left.

2. The two-point stance proved to be significantly faster than the three-point stance when going 90° to the left.

3. When starting straight ahead, the two-point-with-feet-staggered stance proved to be significantly faster than the three-point and two-point stances.

4. The other stances were never significantly faster than the staggered stance.

5. The best stance for all around starting ability was conclusively shown to be the staggered stance.

Elbel, Wilson, and French⁵ constructed an apparatus for measuring speed and horizontal force of charge. They found there was no relationship between speed of charge and force exerted; the coefficient of correlation between body weight and force exerted was significant; and there was an inverse relationship between weight and speed of charge.

Rosenfield¹⁴, using the same apparatus used by Elbel, Wilson, and French, reported no significant relationship between the speed of charge and force; the coefficient of correlation between body weight and force exerted was .51; and the coefficient of correlation between body weight and speed of charge was .08.

Manolis⁶ attempted to determine the relation of individual differences in performance of a fundamental action such as blocking to individual differences in the response time of a typical neuro-motor action such as charging. All members of the U. of California team were tested for average charging time (response time). Three judges also rated 12 of the players on blocking performance, using movies from five games. Manolis reported that:

1. The mean response time of the group was 386 milliseconds.

- (a) Guards 375 milliseconds
- (b) Backs 386 milliseconds
- (c) Centers 389 milliseconds
- (d) Tackles 392 milliseconds
- (e) Ends 398 milliseconds

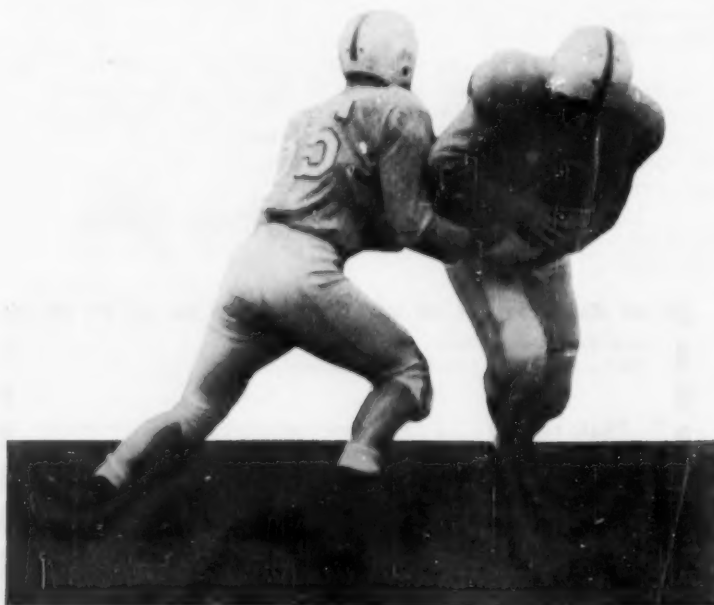
2. A variance analysis of charging speed by playing position yielded a variance ratio of $F=0.459$, which indicates no significant differences in response time.

3. Within a group of experienced university players, there are pronounced individual differences in speed of charging and also in blocking performance. However, there's no statistically significant correlation between these two types of individual differences.

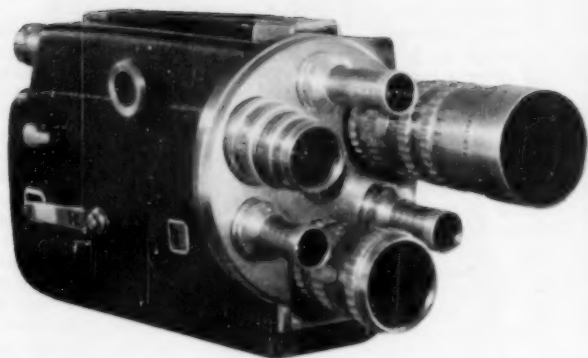
4. An essentially zero relationship exists between total time played in games and speed of response, blocking efficiency, and blocking ability.

5. Position played wasn't related to speed of response.

Fitch⁴ conducted a study to determine which linemen's stances and body positions were superior in terms of starting speeds. The blocking maneuvers tested to determine starting speeds were the straight-ahead block, the 90° block right, the 90°



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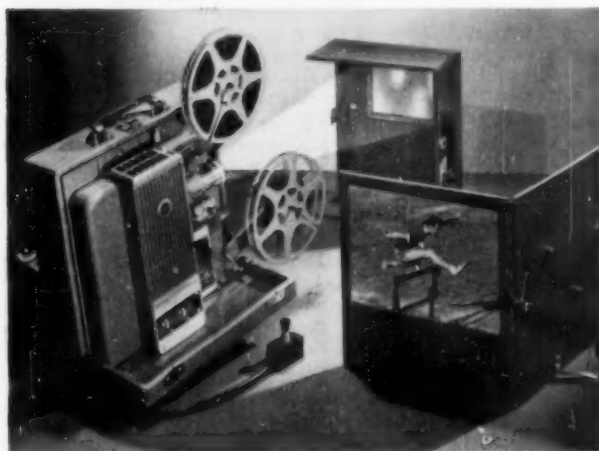
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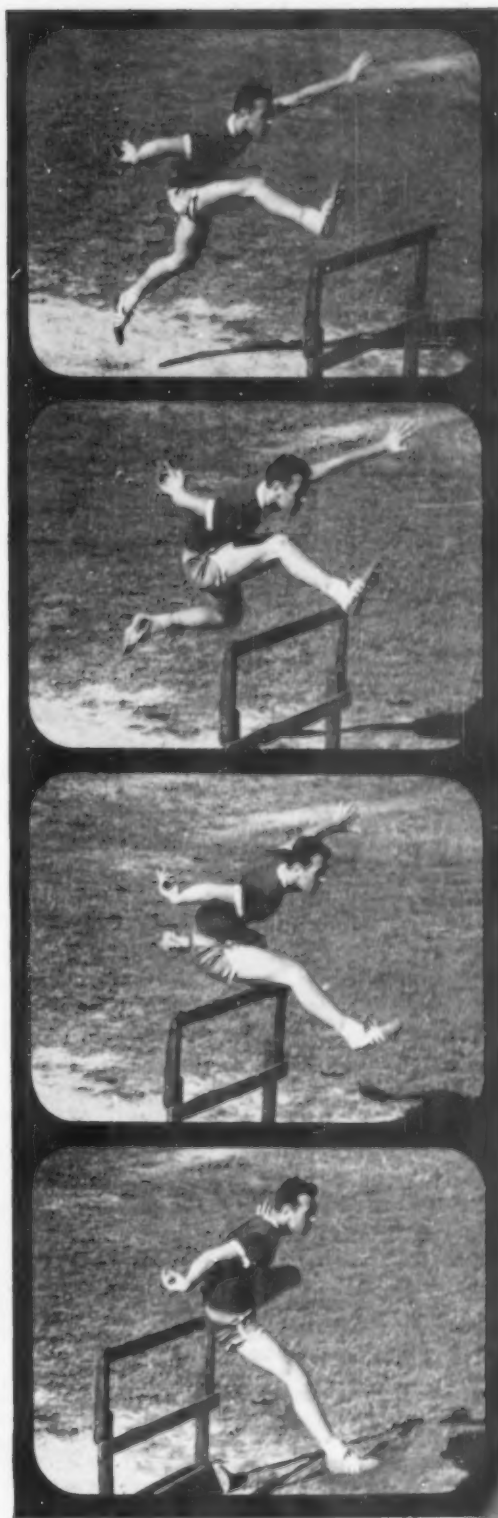
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block left, the 45° block left, the 45° block right, and the pass block.

The 120 volunteer subjects were randomly assigned to six groups. Each group was trained using a different specific stance. The six stances were: (1) three-point parallel with the weight forward, (2) three-point parallel with the weight back, (3) three-point with right foot back and weight forward, (4) three-point with right foot back and weight back, (5) four-point parallel with the weight forward, and (6) four-point parallel with the weight back.

For the 82 subjects who completed all training and testing the following results were reported:

1. The weight-forward body position was superior to the weight back position in performing the straight-ahead block and the 45° block right in terms of starting speed.

2. The weight-forward body position was equally as effective as the weight-back body position in performing the 90° block right, the 90° block left, the 45° block left, and the pass block.

3. The stances used in this study were equally effective for all the blocking maneuvers tested.

4. Starting speeds on the blocking maneuvers were affected equally by the type of body position under any one of the three stances.

5. The starting speeds on all the blocking maneuvers were affected equally by the three stances under any one of the body positions.

Winkler¹⁸ attempted to determine the relationship between linebacking ability and bodily reaction time. 30 high school varsity candidates were given a series of four tests to determine reaction time following a visual stimulus flashed on a screen in front of the subject. The stimulus represented one of the following: a right-end sweep, left-end sweep, forward pass, or a line buck.

When the stimulus play flashed on the screen, thus starting a clock, the subject was to make the appropriate move by reacting in the proper direction and striking one of four inclined planes; each of the planes contained a switch which stopped the clock when depressed.

Winkler reported the following results:

1. Candidates with the best reaction time were not only the best players, but were better in other sports where quick reaction is a factor. Of the top ten in the test, eight played other sports as well as football.

2. Experience and maturity have a direct effect on reaction time.

3. The testing of reaction time of large muscle groups is a definite aid to the coach in selecting his backups and halfbacks and also safety man.

Thompson et al¹⁶ studied the effects of certain selected starting signals on the movement time of high school and college players. Movement time in this study included both reaction

time and motor response of taking an 18-inch step and hitting a contact plate.

All subjects tested were lettermen of the varsity squads at Boston University and a New Hampshire high school. Subjects were tested before daily football practice, while in full football equipment, and after a thorough warmup. They were tested under conditions of rhythmic digits, non-rhythmic word-digits, and non-rhythmic colors used as starting cues.

The tester started the standard electric clock by pressing a contact switch in his hand at the instant at which the starting cue was given. The subject reacted and charged forward with his initial step to strike the contact plate when the pre-arranged signal was given.

RHYTHMIC SIGNAL FASTEST

Results indicated that rhythmic digit starting signals resulted in the fastest movement times for both college and high-school players. Non-rhythmic word-digits (hut-one, hut-two, etc.) were found to result in significantly faster movement times than for non-rhythmic colors. College backs and linemen had consistently faster movement times than high school backs and linemen.

Miles and Graves¹⁰ attempted to determine the effect of anticipatory and non-anticipatory starting signals on the reaction time of players. Four rates of calling rhythmical signals were adopted. These were 40, 60, 100, and 120 single-digit numbers per minute, thus involving interval periods between digits of 1.5, 1.0, 0.6, and 0.5 seconds.

In the experiment with non-anticipatory signals, the men knew only the numeral to be used as the signal number. They didn't know at what position in the series it would be called. A chronoscope was used for recording the response times.

Their results showed that the rate of 100 single-digit numbers per minute (0.6 second interval) and an anticipatory signal resulted in the fastest response time. The mean response time was .127 seconds, while the mean response time for the non-anticipatory signals was .426 seconds. A foreperiod of two seconds to five seconds was most advantageous in this latter.

Miles⁹ studied the response time of players from the charging position. 55 members of the Stanford squad were tested in this experiment. A multiple chronoscope, which would measure seven men at a time, was used for measuring response time. The men assumed their starting position with their heads resting against a trigger. On the word "hike," they charged forward. The conclusions were:

1. The mean response time for the entire group was .3918 seconds.

2. The backs had the fastest time, .360 seconds.

3. Centers were the slowest, .440 seconds.

The finding that the backs reacted fastest differed from the finding of Manolis. The latter found that guards reacted more quickly.

Owens¹² conducted a study to determine the effect of front-to-rear and lateral variations in foot spacing, and variations in hand-to-toe anterior-posterior spacing on: (1) movement time; and (2) force of shoulder impact at the end of movement through a 36-inch horizontal distance.

This study also attempted to determine the effect of a rhythmical and a non-rhythmical count in the starting signal of time initiating and time of executing movement, and on shoulder impact at the end of 36 inches of movement. He concluded:

1. Variations in the toe-to-toe front-to-rear spacing, hand-to-toe anterior-posterior spacing, and the toe-to-toe lateral spacing produced differences of means of 20 individuals' scores per stance in the force of shoulder impact, but these differences weren't great enough to be of significance.

2. The differences in speed of movement, caused by variations in hand and foot spacing, were highly significant. The sprinter's or staggered type stance was far superior to the parallel type stance. Stance number 31, which had a toe-to-toe lateral spacing of 18 inches, a toe-to-toe front-to-rear spacing of 16 inches, and a hand-to-toe anterior-posterior spacing of 24 inches, had the shortest mean movement time. As the foot and hand variations in spacing deviated in either direction from the spacings of stance 31, the mean movement time scores tended to become longer.

SPRINTER'S STANCE SUPERIOR

The superiority of the sprinter's type stance over the parallel type stance was shown by the fact that 11 of the stances that ranked 28 through 40 (ranked according to mean speed of movement scores) were parallel type stances.

3. The reaction-time function and the movement-time function are independent and unrelated functions.

4. The anticipatory-time function and the movement-time function are independent and unrelated.

5. The anticipatory-time function and the reaction-time function are independent and unrelated.

6. Force of shoulder impact and speed of movement are related.

7. Force of shoulder impact and individual weight are related.

More off-sides, as defined in this study, occur when a rhythmical count is used in giving the preparatory and starting signals.

9. Length of leg seems to be positively related to both front-to-rear and lateral foot spacing and anterior-posterior hand-to-toe spacing.

10. Where initial movement is to



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be made in a forward direction, the sprinter's type stance should be employed.

11. The use of the rhythmical count in giving the preparatory and starting signals produced the shortest total time between last verbal symbol (usually called starting signal) and blocking contact.

Miscellaneous studies.

Distance traversed: Messersmith and Fay⁸ did a study that revealed that the activity of the players was comparatively regular during the four quarters of play and that the distances traversed were a function of the score and type of game employed rather than the fatigued and physiological state of the players. They found that the longest distance recorded was 3.64 miles; the player covering this distance was a half-back. The shortest distance, 2.02 miles, was traversed by a tackle.

Strength and endurance: Martie⁷ concluded that football didn't appear to influence the size of the participant in any marked degree. However, the strength and endurance of the players improved considerably.

Emotion: Johnson⁵ found that strong pre-contest emotion of fear and anxiety doesn't seem to be a particularly prominent factor in football.

Perception training: Damron² used two equated groups of high school varsity players who were matched as nearly as possible in regard to eyesight, position played, number of varsity letters earned, intelligence (non-language factors), and chronological age. One group was randomly assigned a two-dimensional image method of instruction in recognition of certain fundamental defenses, while the other group was assigned the three-dimensional slide images as a means of instruction.

The slides used in instruction were made of eight defensive formations as though viewed from six offensive positions in the line (excepting center) and the quarterback position. Each group was trained tachistoscopically by flashing the defensive slide on the screen for 1/100 second.

The group training with two-dimensional slides had a higher percentage of correct responses (79.3%) than the group training with three-dimensional slides (72.2%). Both groups identified formations of live players equally well (95% accuracy) when they were placed in formation and lighted with flashes of one second duration.

Tachistoscopic training appeared to be effective in training football players to recognize fundamental defenses.

Vision: Tussing¹⁷ concluded that there's a tendency for acuity of the left eye to be less after practice. His tests indicated that routine practice causes individual differences, some players showing marked impairment of vision and some an improvement with practice. It appeared that on the average the strain of practice doesn't cause an impairment of the player's

vision from the practical point of view.

Achievement and squad selection: Brace¹ devised an achievement test which consisted of (1) a forward pass at a target, (2) 50-yard dash carrying a football, (3) forward passing for distance, (4) pull out, (5) blocking, (6) punting, (7) dodge and run, (8) charging.

He stated that a battery of achievement tests could very profitably be used in measuring the amount of learning, i. e., general ability, in skills possessed by players. This (Brace asserted) would be of real assistance to coaches in selecting players, particularly where coaches have little previous knowledge of players' abilities.

Flexibility: Sigereth and Haliski¹⁵ found that college members of a service course class were more flexible in a greater number of the body's joints and areas than were college football players.

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An entirely new concept of outsole design, based on the principle of—
MORE SOLE CONTACT
WITH THE FLOOR!



CONSTRUCTION FEATURES:

- Perfect fit provided by scientifically designed lasts
- Loose lining • Sponge cushion insole • Additional sponge cushion heel • Smooth lace-to-toe pattern to avoid chafing and blistering at toe
- Peg-top upper for comfort and fit at back
- Nylon laces . . . will not stretch
- Sizes 6-15 in black or white



"P-F" MEANS POSTURE FOUNDATION

The exclusive "built-in" feature which helps decrease foot and leg muscle strain—helps players perform at their best.

Ask your sporting goods dealer to show you samples of the new Bob Cousy shoe. Place your order NOW when buying your basketball equipment for delivery next fall . . . or write to Watertown 72, Mass.

COACHES: Ask your dealer about these coaching aids—Basketball Movie . . . Bob Cousy Basketball Booklets . . . Foul Shooting Record Charts.

"P-F" MADE ONLY IN **B.F. Goodrich** AND **Hood** BRANDS

QB KEY to the

By **CARL K. BENHASE**, Berne Union H. S., Sugar Grove, Ohio



THE KEY PLAYER of any T-formation team is the quarterback. We've yet to see any outstanding T team that didn't have at least a good quarterback. If a coaching staff cannot locate at least one good prospect for this position, then we suggest they change to another offensive formation.

We look for the following characteristics in a quarterback:

1. Large hands.
2. Tallness.
3. A leader.
4. Good scholastic grades.
5. At least medium speed.
6. Strong passing arm.
7. Sharp eyes.
8. Well-liked and respected by others.
9. Courage.

We'll overlook the lack of tallness if the prospect possesses good speed.

Quarterback Stance (pictures):

1. Toe-to-instep.
2. Feet shoulder-width apart.
3. As far from center as reach will permit.
4. Slight bend in knees and elbows.
5. Body is semi-relaxed.
6. Head is up and back is as straight as possible.



7. Right hand is placed evenly under center's crotch, palm down.

8. Thumb of left hand is placed next to thumb of right hand.

9. Fingers are spread and bent backward.

10. Slight lift is applied to center.

Our varied running and passing series prevent a defense from keying off our staggered stances.

Essential Drills:

1. Team Cadence (3 minutes): Squad forms a circle around the quarterbacks in the center. Each qb in the center takes a turn at calling signals. On a designated signal, all the team members clap their hands.

2. Exchange: 15 minutes each practice the first week, 10 minutes each practice the second week, 5 minutes each practice in early season. Discontinued after 2nd or 3rd game unless there's exchange difficulty.

The quarterback and center must help one another on exchange problems. We want the ball to be in good "hand-off" position when it's snapped to the quarterback. We find it more functional to adjust the ball from a hand-off position to a passing grip than vice-versa.

3. Ball Drop-and-Catch: The quarterback holds the ball waist high and palm down in one hand. He then drops the ball lightly and attempts to catch it before it hits the ground. He should practice an equal amount with each hand. We find that one to two minutes of this drill each practice helps build strong hands and improves the "touch" of the quarterback.

4. Ball In-and-Out of Belly (two hands): We use this one minute each practice to improve the quarterback's function in our belly series.

5. Passing from Kneeling Position: Besides being a good warm-up drill, this drill encourages the over-hand pass.

6. Quick Movement to Passing Position (clock): Since most of our passes are from the pocket, we want good speed and depth attained by the quarterback. Six yards back from his initial position has proven very satisfactory. The best time that we have recorded (which also has proven very satisfactory) is 1.6 seconds from the time of the snap of the ball.

7. Dodging Pass Rushers: To develop agility and to become accustomed to rushing linemen, we have one player at a time rush the quarterback (from different angles); and he (quarterback) has five seconds from the time of the snap to pass the ball.

8. Ball-Handling and Faking: Excellence in this area can only be accomplished by drilling the entire backfield on running plays. We walk through the movements of a new series first; then go at half speed until we're ready for full-speed action.

Other successful quarterback procedures:

Ball Handling:

1. On hand-offs, the quarterback is responsible for placing the ball softly on the runner's belt.

2. The quarterback must look where he's placing the ball on hand-offs and throwing it on pitch-outs.

3. Maintain initial body stance while moving through offensive backfield.

4. Keep ball in close to belt while moving through offensive backfield.

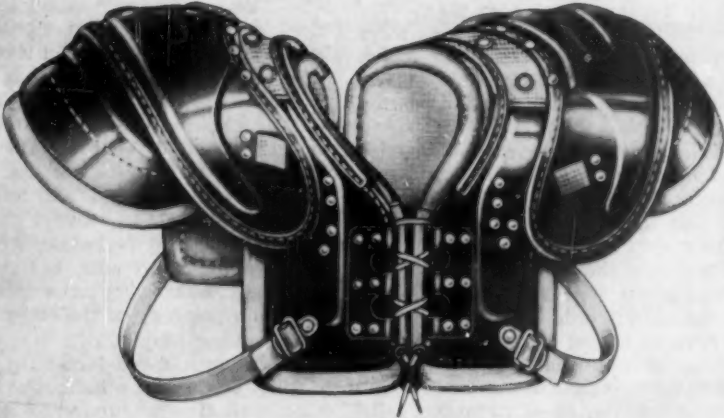
5. Hands and arms must "give" with a hand-off.

6. The fewer the hand-offs, the less chance there is of fumbling.


A good safety precaution is to have all backfield men wear their helmets during any practice session.

(Continued on page 61)


U.S. ENSOLITE-LINED EQUIPMENT BLOCKS OUT FOOTBALL PUNISHMENT





SHOULDER PAD



HIP PAD



HELMET

Look for this tag—your assurance of the finest protective padding for sports.

The finest impact protection you can supply your players is U. S. Ensolite-lined equipment. The closed-cell vinyl sponge structure of U. S. Ensolite positively cushions the impact of hard driving blocks and tackles. In fact, thorough testing by America's finest sporting goods makers has proved that U. S. Ensolite soaks up shock better than any other padding material. U. S. Ensolite provides

protection without bulk or weight. Because it is light, extremely flexible and won't absorb weight-producing moisture, U. S. Ensolite-lined equipment doesn't steal steps from a runner... he's free to use *all* the speed he has. When you next order equipment, specify U. S. Ensolite-lined equipment to your supplier... there's no better way to keep your squad in top shape... at top speed.



United States Rubber

Mishawaka, Indiana

The Unbalanced Split T

(Continued from page 7)

the huddle. He merely says "unbalanced right or unbalanced left."

The fullback and halfback dive into the line on every running play, with one exception, which will be discussed later on. Neither back knows whether he's going to get the ball. As a result, our backs carry out very fine fakes.

The two diving backs go straight ahead and look for the hole to open up. The fullback always hits quickly between the inside tackle and guard. But the halfback, who has a longer dive to make, may vary his path to hit over the original position of the outside guard, between the outside guard and tackle, or over the original position of the outside tackle. This will be determined by the blocking of these two linemen.

We instruct our quarterback to run the quarterback sneak anytime he feels he can make a gain of at least 3 yards.

If the defense is ganged up over the center, the quarterback is told to look down the line at the defense in front of the inside guard and

tackle, and then at the defense in front of the outside guard and tackle. He must decide which back seems to have the better "natural defensive" hole to hit into. If satisfied that one or the other has a chance for a gain, he'll give the ball to that player.

If the defensive front has all our linemen covered, the quarterback fakes to both backs and runs the Split T quarterback keep play.

The quarterback is also always on the look-out for a defense which drastically overshifts to the unbalanced side. If he feels he can bootleg around the weak side, he has a verbal signal with our end, who tries to hook the weak-side defensive end to the inside.

Our quarterback waited all year for a spot to run this bootleg play. Finally, in the fourth quarter of our final game, leading 12-0, he got an important first down in our own territory by taking off to the weak side from this formation. Though he didn't outrun the corner linebacker, after sprinting 20 yards laterally, he cut sharply inside for 11 yards.

To keep the blocking rules simple, we told our wingback to always block from the inside out on the first man head on him or to his outside on the line of scrimmage. This would give the quarterback a better chance to cut inside for several yards when forced to run his keep play.

Our right guard and right tackle and left guard and left tackle worked together, trying to "split block"; that is, make a hole between them. The inside pair always blocked straight ahead because of the quickness of the fullback hitting into the line. The outside pair could cross-block on a prearranged signal to better make a hole between them.

However, we told our guards and tackles that more important than making a hole was to first make contact and then drive the defensive lineman in the easiest direction.

Our weak-side end and center were instructed to always block straight ahead, trying to take the defense to the weak side, but, more important, making contact and driving a man one way or the other.

The other play which we used from the unbalanced formation was a quick pitch to the halfback. This play was always run on a quick count before the defense realized

Amherst and Williams Colleges will meet in the Centennial renewal of their first game at Amherst May 15 and 16.

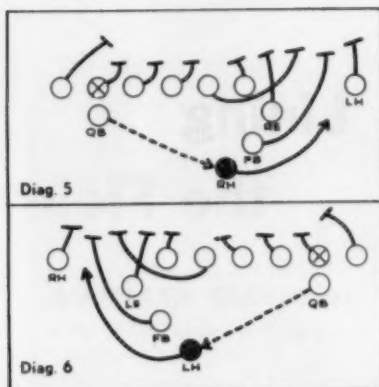


100 th ANNIVERSARY College Baseball

75 th ANNIVERSARY Louisville Slugger Bats

A hundred years of college baseball is an accomplishment which is uniquely American. To have been a part of this great collegiate baseball program for the past 75 years is an honor of which the makers of Louisville Sluggers are justifiably proud. So congratulations — from a youngster to an oldster!

ALSO MANUFACTURERS OF GRAND SLAM GOLF CLUBS



that the fullback has been stationed wide as a blocker (**Diags. 5 and 6**).

We ran the ball 65 times from this formation and gained a total of 276 yards. We fumbled twice and were thrown for losses three times totaling seven yards. The other 60 plays broken down looked like this:

Play	Times Run	Yards Gained
QB Sneak	17	72
QB Keep	6	38
QB Bootleg	1	11
FB Dive	10	24
HB Dive	21	88
Quick Pitch	5	43
	60	276

The unbalanced attack was directly responsible for winning our third game of the season. Behind 12-14 at the half, we took the kickoff and ran 11 consecutive plays from this formation, gaining 57 yards and setting up the winning touchdown.

Although this attack was primarily designed for a running game, we did throw a total of 9 passes from the formation, completing four.

We threw a deep sideline pass and a deep middle pass to the flanked halfback, a look-in pass over the short middle to the halfback, a jump pass to the weak-side end over the middle, and a quarterback dropback pass to the weak-side end in the flat after the quarterback faked to the fullback hitting into the line.

We intend to exploit the unbalanced attack even more in 1959. We're thinking of flanking the weak-side end some, and certainly will pass more from the formation.

I strongly recommend the installation of this unbalanced attack, whether you're looking for a change of pace for the Split T or just looking for something different. The simplicity of the blocking and ball-handling make it relatively easy to teach, and, if nothing else, it gives the opponent something new to worry about.

The time spent in defending this formation in practice will take away valuable time from many other phases of the game.



"...it's RALEIGH,

by golly, for me!"

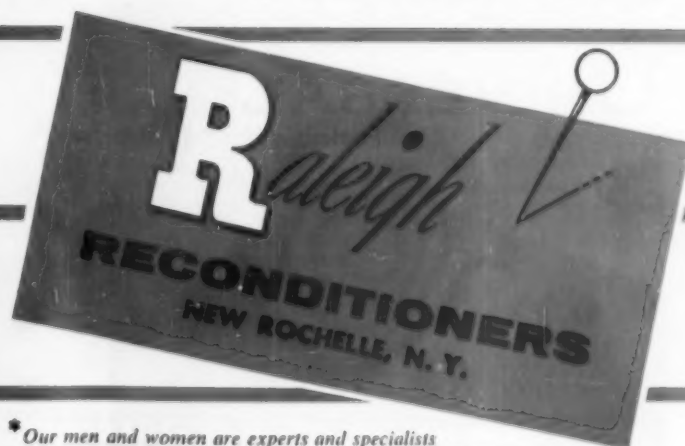
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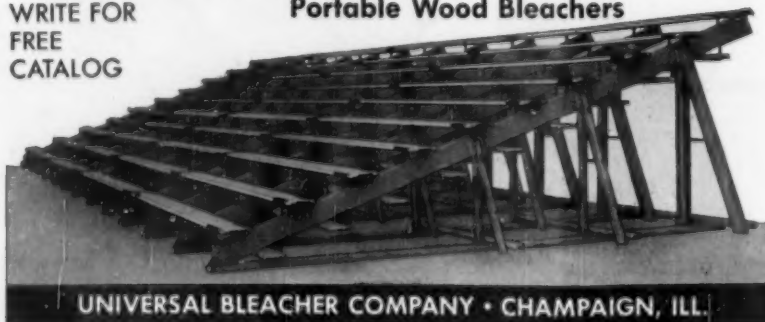
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Lining the Field

By GERALD HARTMAN

Principal, South Lyon (Mich.) H. S.

IF "clothes make the man," then neat grooming makes the football field.

Our field was a mess in the fall of 1957. Bald spots were common and the lime marking had killed off the grass around all the lines. It was necessary to line before every game, and even then we were worried for fear rain might wash out the lines. Ragged lines weren't unusual with us.

After talking the matter over with the School Board and checking costs, we decided to attack the problem in the spring of 1958. Since our budget was limited, we had to make careful decisions.

First we estimated the amount of ground to be re-seeded. This turned out to be only 25% of the total area. Then 3½ tons of fertilizer were purchased and the ground was worked up by our own help. We used 300 lbs. of grass seed. Of course by this time we forbade anybody on the field. Then we watered the grass when the weather required it.

Another nearby field was mowed down close and used for various spring athletics. By fall the field was in pretty good condition. But we did our early season football practice on a rougher practice field.

When it came time to prepare for the first game, we knew we had tender grass where the lines had formerly been. So, at the suggestion of Fred Gerhardt, our football coach, we moved our entire field 8 inches to the right and 10 inches back. That meant all our new lines would fall on tough sod instead of the new grass.

Next, we faced the problem of lining. Since our old lime method would have the field back in its former condition in no time, we hoped to find something that would do the job as well, or better, without the hazards.

We'd heard about an athletic field paint that was being introduced by one of the large national paint companies. We found it to be a paste paint that mixed with water and



had been proven safe for grass on a number of sports fields.

Since there are 3960 feet of lines, without figuring lines behind the goalposts, application would have to be done by machine. Through the paint manufacturer, we contacted a firm which made a gravity feed marking machine that rolled this liquid paint onto grass. After investigation, we purchased it.

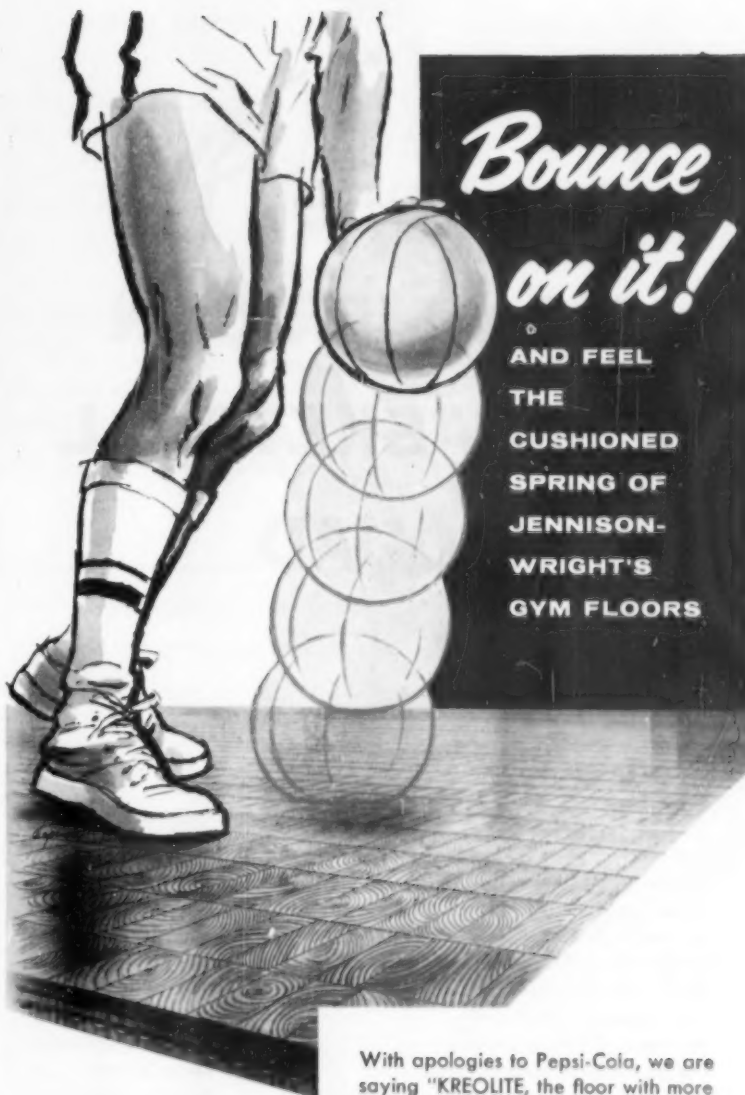
We're now able to lay lines in wet and windy weather as well as under normal dry conditions. The actual blades of grass are painted and stand up for good visibility. These lines stay trim and don't shift during play.

Aside from better appearance, our painted lines have the advantage of not being affected by weather conditions. With regular lining, we always faced the hazard of rain between line-laying and game time. Sometimes we waited until the last minute to put lines down.

At present we're using around 8 to 10 gallons of paste paint, which we dilute 100% with water to line the field and end zones. It takes 3 hours to do the job. We never re-do the field for a reserve game. The lines often stay so sharp and clean-cut that on one occasion we didn't re-mark the field for a major game. On our practice field we've been able to cut line marking in half.

Actually our over-all savings lies in the reduction of necessary relinings. We also use this same paste paint for marking the areas used by our band and outdoor physical education classes.

The fact that our South Lyon team won our league championship can't be credited to the "new look" of our football field. But we've had a good deal of comment on its improved appearance. Now we can keep it that way with a minimum of maintenance.



With apologies to Pepsi-Cola, we are saying "KREOLITE, the floor with more bounce to the ounce".

It so aptly describes FLEXIBLE STRIP End Grain Wood Block Flooring with its built-in cushioning resiliency.

Other most wanted features that make it a better gym floor; Durable Beauty, Ease and Economy of installation and maintenance. It's safer too, because it's splinter-proof.

Liked by players and coaches and preferred by budget conscious school officials, these FLEXIBLE STRIP floors will prove to be the most satisfactory you ever specified. Write today for performance and data specifications. Take your first step to better floors for gyms, multi-purpose rooms or shops.

**JENNISON
WRIGHT**

**FLEXIBLE STRIP
END GRAIN
FLOORS**

THE JENNISON-WRIGHT CORPORATION

TOLEDO 9, OHIO



1959 ALL-AMERICAN H. S. BASKETBALL SQUAD

Name and School	Ht.	Coach
Tom Hoover (Carroll) Washington, D. C.	6.9	Bob Dwyer
Tom McGrann (Watertown) S. D.	6.8	Jim Marking
Al Santio (Hope) Providence, R. I.	6.7	Mike Sarkesian
Ken Glenn (East Tech) Cleveland, O.	6.6	John Broski
Tommy Boyer (Fort Smith) Ark.	6.6	Gayle Kaundart
Pat Richter (Madison East) Wis.	6.6	Verlyn Belisle
Dave Downey (Canton) Ill.	6.5	
Bill Galantai (James Madison) N. Y. C.	6.5	Jammy Moscovitz
Red Thorne (Princeton) W. Va.	6.5	Buster Brown
Steve Gray (Washington) San Francisco, Calif.	6.4½	John W. McGrath
Tom Bolyard (South Side) Fort Wayne, Ind.	6.4	Don Reichert
Bob Cuzby (Olympus) Holladay, Utah	6.4	
Art Heyman (Oceanside) N. Y.	6.4	Frank Januszkeski
Rich Porter (Kellogg) Ida.	6.4	Ed Hiemstra
Jim Smith (Santa Cruz) Calif.	6.4	Emmett Thompson
Bill Raftery (St. Cecilia's) Kearny, N. J.	6.3½	Joe Palermo
Steve Pauly (Beaverton) Ore.	6.3½	Ted Wilson
Ralph Heyward (Overbrook) Philadelphia, Pa.	6.3	Paul Ward
Tom Kezar (Austin) Minn.	6.3	Ove Berven
Darrell Sutherland (Glendale) Calif.	6.3	
Ed Thomas (McClymonds) Oakland, Calif.	6.3	Paul Harless
Pat Doyle (North Marshall County) Ky.	6.2	Charlie Lampley
Nolan Ellison (Wyandotte) Kansas City, Kan.	6.2	Walt Shublem
Bill Small (West Aurora) Ill.	6.2	Dick Dorsey
Dom Perna (Wilbur Cross) New Haven, Conn.	6.1	Sal Verderami
Jim Rayl (Kokomo) Ind.	6.1	Joe Platt
Granny Lash (Chester) Pa.	6.½	Bob Forwood
Donnie Burks (Molloy) N. Y. C.	5.11	Jack Curran
Ernie Moore (Sumner) Kansas City, Kan.	5.10	Tom Ritone
Vinnie Ernst (St. Aloysius) Jersey City, N. J.	5.8	Bob O'Connor

JUST as it did in collegiate play, the pendulum in the production of outstanding high school basketball players swung westward in 1959, and the state of California came up with four places on the fourth annual Scholastic Coach All-American Squad.

Reports from the San Francisco Bay Area tell us that **Ed Thomas** of McClymonds of Oakland (Bill Russell's alma mater), **Steve Gray** of San Francisco's Washington High, and **Jim Smith** of Santa Cruz were but three of the outstanding players in a vicinity which could field a five against any state in the union.

The other Californian to make our squad is **Darrell Sutherland** of Glendale, a backcourt man who led his school to the state's Southern Championship despite an attack of flu.

Talent as usual comes mainly from the East and Middle West, with New York nailing down three places and New Jersey, Pennsylvania, Indiana, Illinois, and Kansas each grabbing two.

The system of selection was changed from a 20 to a 30 man Squad. The additional 10 places afford a better opportunity to add outstanding backcourt men, and this year's group of small boys is exceptional. Our Squad has been listed as accurately as possible according to height, while the nine regional squads of 15 men each are listed alphabetically by states.

While there doesn't appear to be a standout of the calibre of Oscar Robertson, Jerry West, or Jerry Lucas on the 1959 aggregation, some of the members came in for almost as much publicity, and to stand out in the brand of schoolboy basketball being played today is indication enough that a player will make good in college.

West Virginians are expecting **Rod Thorne** of Princeton to be as outstanding as Jerry West in college. The state legislature even passed a resolution entreating the boy to attend college in his own state. Thorne is a three-year all stater who carried a 30.5 scoring

*All-Americans denoted by asterisks

NEW ENGLAND

(Conn., Me., Mass., N. H., R. I., Vt.)

*Dom Perno (Wilbur Cross) New Haven, Conn.
 Carl Spencer (Crosby) Waterbury, Conn.
 Maurice Sykes (Hillhouse) New Haven, Conn.
 Ken Stone (Deering) Portland, Me.
 Joe Taylor (Bangor) Me.
 Archie Tracy (Bangor) Me.
 Bob Boberg (St. John's) Worcester, Mass.
 John Ball (Everett) Mass.
 Ed Gaarring (Commerce) Springfield, Mass.
 Paul Gomes (New Bedford Vocational) Mass.
 Al Briggs (Nashua) N. H.
 Norm Higgins (Concord) N. H.
 Pete Tolman (Keene) N. H.
 *Al Santio (Hope) Providence, R. I.
 Bobby Blake (Windsor) Vt.

MIDDLE ATLANTIC

(N. J., N. Y., Pa.)

Ed Douglas (Moorestown) N. J.
 *Vinnie Ernst (St. Aloysius) Jersey City
 *Bill Raftery (St. Cecilia's) Kearny, N. J.
 Don Bufford (White Plains) N. Y.
 *Donnie Burks (Molloy) N. Y. C.
 Bill Connors (Linton) Schenectady, N. Y.
 *Bill Galantai (Madison) N. Y. C.
 Connie Hawkins (Boys) N. Y. C.
 *Art Heyman (Oceanside) N. Y.
 LeRoy Riley (Newburgh) N. Y.
 Jim Chacko (Charleroi) Pa.
 *Ralph Heyward (Overbrook) Philadelphia
 *Granny Lash (Chester) Pa.
 Obie Snyder (Germantown) Philadelphia
 Matt Szykowny (No. Catholic) Pittsburgh

SOUTH ATLANTIC

(Del., D. C., Md., N. C., S. C., Va., W. Va.)

Charles Neal (Conrad) Wilmington, Del.
 Winfred Backus (Redding) Middletown, Del.
 *Tom Hoover (Carroll) Washington, D. C.
 George Leftwich (Carroll) Washington, D. C.
 Monk Malloy (Carroll) Washington, D. C.
 Rhodie Brogdon (Southern) Baltimore, Md.
 Carl Mac Cartee (Bethesda-Chevy Chase) Md.
 Lawrence Clayton (Zeb Vance) N. C.
 Bob Jamieson (Greensboro) N. C.
 Ronnie Collins (Mt. Zion) Winnsboro, S. C.
 Wayne Proffitt (Glass) Lynchburg, Va.
 Joe Clarke (Granby) Norfolk, Va.
 Gay Elmore (Stonewall Jackson) Charleston, W. Va.
 *Rod Thorne (Princeton) W. Va.
 Carl Ward (South Charleston) W. Va.

SOUTHEAST

(Ala., Fla., Ga., Ky., Miss., Tenn.)

Reece Carr (R. E. Lee) Montgomery, Ala.
 Lee Peake (Selma) Ala.
 Bernie Butts (Hialeah) Fla.
 Donnie Hughes (Pompano Beach) Fla.
 Mickey Babb (Brown) Atlanta, Fla.
 Layton Johns (Nahunta) Ga.
 Ken Dalton (Fancy Farm) Ky.
 *Pat Doyle (North Marshall County) Ky.
 Bob Rice (Sandy Hook) Ky.
 Louis Stout (Cynthiana) Ky.
 Tom Thacker (Grant) Covington, Ky.
 Grandle Barron (Wheeler) Miss.
 Bobby Shows (Brookhaven) Miss.
 Ronnie Lawson (Pearl) Nashville, Tenn.
 Merless Woods (Rogersville) Tenn.

EAST CENTRAL

(Ill., Ind., Mich., Minn., Ohio, Wis.)

*Dave Downey (Canton) Ill.
 Bill Kurz (Notre Dame) Quincy, Ill.
 *Bill Small (West Aurora) Ill.
 *Tom Bolyard (South Side) Fort Wayne, Ind.
 Marvin Puett (Springs Valley) Ind.
 *Jim Rayl (Kokomo) Ind.
 Jim Ludwig (Sault Ste. Marie) Mich.
 Tom Pine (Austin) Detroit, Mich.
 *Tom Kezar (Austin) Minn.
 Dean Sullivan (Wayzata) Minn.
 Elijah Chatman (Central) Akron, O.
 *Ken Glenn (East Tech) Cleveland, O.
 Jim Stone (East Tech) Cleveland, O.
 Ron Glaser (Washington) Milwaukee, Wis.
 *Pat Richter (Madison East) Wis.

WEST CENTRAL

(Iowa, Kan., Mo., Neb., N. D., S. D.)

Howard Beernink (Sioux Center) Iowa
 Joe Cahalan (Mason City) Iowa
 Dick Shaw (Roosevelt) Des Moines, Iowa
 Jim Baxter (Russell) Kan.
 Jim Dumas (Topeka) Kan.
 *Nolan Ellison (Wyandotte) Kansas City, Kan.
 *Ernie Moore (Sumner) Kansas City, Kan.
 DeWayne Bond (St. Charles) Mo.
 Gary Garrison (Christian Bros.) St. Louis, Mo.
 Donnell Reid (Beaumont) St. Louis, Mo.
 Bob Eickholt (Holy Name) Omaha, Neb.
 Chet Paul (Lincoln) Neb.
 Allen Peithman (Hebron) Neb.
 Ron Carlson (Bismarck) N. D.
 *Tom McGrann (Watertown) S. D.
 LeMoine Torgerson (Forestburg) S. D.

SOUTHWEST

(Ariz., Ark., La., N. M., Okla., Tex.)

Eddie Brown (Flowing Wells) Ariz.
 Dennis Dairman (North Phoenix) Ariz.
 *Tommy Boyer (Fort Smith) Ark.
 Donnie Kessinger (Forrest City) Ark.
 Eddie Myles (Jones) No. Little Rock, Ark.
 John Chavanne (DeLaSalle) New Orleans, La.
 L. V. McGinty (Slidell) La.
 Tom Clark (Roswell) N. M.
 Ralph Martinez (El Rito) N. M.
 Jim Barnes (Stillwater) Okla.
 Max Schuck (Waynoka) Okla.
 Robert Ledbetter (Killeen) Tex.
 Don Rosick (Poly) Fort Worth, Tex.
 Lewis Qualls (Smiley) Houston, Tex.
 Coyle Winborn (Pampa) Tex.

ROCKY MOUNTAIN

(Colo., Ida., Mont., Utah, Wyo.)

Ken Charlton (South) Denver, Colo.
 Pat Baggot (Greeley) Colo.
 Mike Maloney (Englewood) Colo.
 Frank Zupancic (North) Denver, Colo.
 Jim Keller (Caldwell) Ida.
 *Rich Porter (Kellogg) Ida.
 Jeff Wombolt (Kellogg) Ida.
 John Rickman (Central Catholic) Butte, Mont.
 Kermit Young (Fairfield) Mont.
 Gary Batchelor (Davis) Kaysville, Utah
 *Bob Cozby (Olympus) Holladay, Utah
 Jim Kelson (Juab County) Nephi, Utah
 Al Bozner (Rock Springs) Wyo.
 Fred Gish (Cheyenne) Wyo.
 Bob Hanson (LaGrange) Wyo.

FAR WEST

(Alaska, Calif., Hawaii, Nev., Ore., Wash.)

Paul White (Mt. Edgecumbe) Alaska
 *Steve Gray (Washington) San Francisco, Calif.
 Jack Hirsch (Van Nuys) Calif.
 Henry Johnson (Fremont) Los Angeles, Calif.
 Bob Sommers (San Marino) Calif.
 *Darrell Sutherland (Glendale) Calif.
 *Jim Smith (Santa Cruz) Calif.
 *Ed Thomas (McClymonds) Oakland, Calif.
 Joe Weiss (St. Mary's) Berkeley, Calif.
 Melvyn Tam (Marknoll) Honolulu, Hawaii
 Paul Hornyak (Basic) Henderson, Nev.
 Terry Baker (Jefferson) Portland, Ore.
 *Steve Pauly (Beaverton) Ore.
 Tom Halvorson (John Rogers) Spokane, Wash.
 Jim Johnson (Stadium) Tacoma, Wash.

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average in 1959, but has a career average of 28.85. It's estimated that he played 2,462 minutes of high school ball and scored at the rate of 1.7 points per minute.

New Jersey, too, claims to have come up with a phenom in **Billy Raftery** of St. Cecilia's of Kearny, a small Catholic school. Raftery hit 837 points for a 34.4 average, took down 27 rebounds per game, and is considered the best Jersey schoolboy since Tommy Heinsohn.

We've also placed Billy's "Biddy Buddy," **Vinnie Ernst** of nearby Jersey City's St. Aloysius on the Squad. Vinnie was voted "Mr. Biddy Basketball" while in grammar school, but unfortunately didn't grow very tall and at 5-8 he's the Squad's shortest man.

Unluckily for St. Aloysius' opponents, Billy did continue to grow as a basketball player and he rates the post of "feeder extraordinary" as well as a potent scorer with a 19.7 scoring average. We understand Raftery and Ernst hope to attend the same school, and it will be "Katy Bar the Door" when Vinnie starts slipping passes to the hot-shooting Raftery.

Two other lads stood just under the 6-foot mark: **Donnie Burks** of Archbishop Molloy who was voted the outstanding schoolboy in the greatest of all proving grounds, New York, and **Ernie Moore**, a slippery 5-10er from Kansas City Sumner which went all the way to the Kansas AA finals, only to lose in overtime. Moore was voted the best in his tournament and was a great scorer and rebounder for his size.

Burks had everything a coach seeks for in a backcourt man, being compared with Alan Seiden and Bob Cousy as the best little man New York City has ever produced. Besides his remarkable play-making, Burks paced the Molloy scorers with a 22-point average.

New York also placed **Bill Galantai** of James Madison High, a big man with great moves and ability at 6-5 (averaged 22 points a game); and **Art Heyman**, scoring jet from Oceanside on Long Island who played his greatest ball in the sectional tournament (New York has no state championship).

Heyman scored over 1,830 points in his career, easily breaking the county record of 1,142 set by the great Jimmy Brown of Manhasset High, Syracuse U., and Cleveland Browns fame. His rebounding, scoring, feeding, steals, and key free-throwing drew raves.

Kansas also placed 6-2 smoothie **Nolan Ellison** from state champion Wyandotte (Kansas City).

Tom Hoover of Archbishop Car-

roll (Washington, D.C.) is the Squad colossus at 6-9 and 250 pounds. Tom didn't need to score as much as some of the others because of his team's balance, but he had great moves and still managed to hit close to 20 per game.

Carroll also had a 6-10 starter, and placed four boys on the all-city five. The team won the Newport, R.I., Eastern States Catholic tourney and the Washington K. of C. tourney and probably rates with the best ever developed in the East.

Pennsylvania's two representatives include the lone junior on the Squad, **Granny Lash** of Chester. Reports from the Keystone state indicate the greatest amount of talent there since 1951 (Tom Gola, Ed Fleming, Joe Holup, Dick Ricketts, Maurice Stokes). Also selected is **Ralph Heyward** of Overbrook's Philadelphia city champs—a defensive whiz who could also score. Overbrook, of course, is Wilt the Stilt's alma mater—and how come some coaches have all the luck?

Indiana comes up with two gems in **Jim Rayl** of Kokomo and **Tom Bolyard** of Fort Wayne South Side. Rayl, despite a slight frame, hit over half his shots on long sets, jumpers and quick drives. He averaged 26.8 in a 61-game career, set a state tourney scoring record with 114 in four games, tallied 40 and the winning basket in his team's memorable battle with South Side, and had many other accomplishments.

Bolyard, a member of the 1958 championship five, didn't rack up as many points but is just as well rated by college coaches.

Illinois placed **Bill Small** of West Aurora and **Dave Downey** of Canton and had a half-dozen who were almost as highly recommended. Small, from the descriptions, sounds a good deal like Indiana's Rayl in that he loves to shoot and can hit from anywhere. He had a .460 average from the floor and for a backcourt man that's sensational. His average was 22 points per game. Downey, a great rebounder as well as scorer, averaged 23 and .540 from the floor.

Notes on our other stars:

Tom McGrann of Watertown, the best big man at 6-8 to come out of South Dakota, set a scoring record for state tournament play.

Al Santio of Hope (Providence) averaged 25 per game, though his potentialities still weren't fully exploited. A New England observer reports that if his teammates had been able to get the ball to him in the New England tourney "he'd have scored a million."

(Concluded on page 54)

"Here Below"

(Continued from page 5)

the competition that they don't run their race."

It all sounded faintly familiar—until we recalled where we had heard it before. Another great athlete, Bob Cousy, had advanced the selfsame theory to us some years ago.

"Bob," we had said, "in the waning moments of a close ball game, do you feel any extra tension?"

In the same placid manner as Gilbert, Bob had rejected the thought. "Not me," he had replied. "I know exactly what I can do. I let the other fellow worry about me."

And there you have one of the hall-marks of the truly great athlete.

EVER since the Kraus-Weber report supposedly pin-pointed the nation's physical debility, we've been sharpshooting at it with facts and figures. Our premise, in a cartridge shell, has been this: If Americans keep growing weaker and flabbier, how do they keep breaking records in so many sports?

Why, look at what happened the past few months alone. In the 1959 NCAA swimming championships, precisely five American, seven NCAA, and eight meet marks went under. And in track, Johnny Thomas broke the world high jump record, Don Bragg smashed the pole vault mark, and Dallas Long created a new shot put standard.

To us this is symptomatic of a physically healthy nation. Argue all you want about improved coaching, superior training, and better equipment. But in the final analysis you simply cannot keep breaking records without a superior physical specimen.

If we're really debilitating physically, as Kraus and Weber would have us believe, we would never be mass-producing such marvelous athletes.

WE'VE never doubted that sports can be wholesomely instrumental in building character, developing leadership, and preparing youth for useful citizenship. At the same time, we've always felt queasy about justifying participation on those grounds.

Too many soap-box orators are too willing to launch this type of roman candle. It's a sure-fire bet to

(Concluded on page 55)

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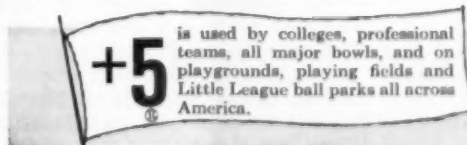
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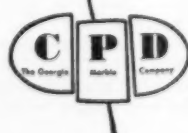


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COACHES' CORNER



Please send all contributions to this column to Scholastic Coach, Coaches' Corner Dept., 33 West 42 St., New York 36, N. Y.

AT A GOLF tournament recently, the club chairman was surprised to catch the local minister driving off about 10 yards in front of the tee mark.

"I'm afraid, sir," he remarked, "you must be disqualified. You just can't do that."

"Can't do what?" demanded the reverend indignantly.

"Why, drive off from the ladies' tee."

"My friend," the pastor murmured, "I'm playing my third stroke."

The pro basketball coach was notorious for "chewing out" players who made mistakes. One evening he inserted a rookie in a key situation, who promptly lost the ball on a wild pass, costing the ball game.

As the youngster fearfully approached the bench, ready to be eaten alive, he saw his coach on his knees, apparently praying. The lad kneeled beside the coach and said, "Coach, I'm delighted to join you in prayer when only a moment ago I feared for my life."

"Shut up!" snapped the coach. "I'm saying grace."

When Bob Buhl, the Milwaukee pitcher, visited the Mayo Clinic to have his arm trouble diagnosed, the medicos couldn't pinpoint the source of pain. So they told Bob to return to Milwaukee and throw every day as hard as he could until the arm got as sore as he could stand it. Then return to the Clinic.

This ludicrous prescription recalls the story about the ball player who had a common cold. He went to the doctor who examined him and said, "Go home and take a hot bath. Then dry yourself off, go into your bedroom, open the window, and do toe-touching exercises for 15 minutes."

"But, Doc," protested the pitcher, "it's freezing outside. I'll catch pneumonia."

"Good," replied the doctor. "For that we have a cure."

Yogi Berra finally caught up with Ernest Hemingway in Toots Shor's famous restaurant. The great novelist, bearded and wearing a battered hat and raincoat, was about to sally forth into the stormy night.

When Yogi returned to his table, he remarked to Tom Meany of the Yankee staff, "Gee! He's a character."

"He's a writer," said Meany.

"Yeah?" said Yogi, "with what paper?"

In the 1958 Carousel Tournament, Bill Reinhart, George Washington hoop coach, complained to an official about one of his calls. "And don't tell me I couldn't see the play from where I was sitting," Reinhart warned. "I've been officiating from that place for 40 years."

The Cardinals, preparing for their trip to Japan in the fall of 1958, were being given their overseas "shots" by the team doctor. Ken Boyer, investigating the sera, came across one marked "cholera."

"What's that for?" he asked.

"When you get the 'collar' in four," replied Stan Musial, "that's cholera."

Columbia's affable football coach, Buff Donelli, was talking about baseball. "I played the game a bit when I was younger. Wasn't any star, but hit the long ball occasionally." Turning to his wife, for confirmation, he said, "I could hit the long ball, couldn't I, dear?"

"Yes, Buff," she replied. "It was the small white ball that gave you trouble."

In the White Sox days of Jimmy Dykes and Zeke Bonura, Manager Jimmy would always check catcher Luke Sewell whenever Zeke, probably the worst fielding first baseman of all time, would give the one-hand salute to balls hit by first base.

Invariably after each misdemeanor, Dykes would ask Sewell, "You think he should have got it?" Luke would reply "yes" and Dykes would chew out Zeke.

Finally Sewell began to think, "Bonura won't be friendly any more if I keep this up." So the next time a ball went past first and Dykes asked, "Should he . . . ?" Luke replied, "I don't think so."

Thereupon Dykes took off on Sewell. "You mean to tell me a first baseman couldn't have gotten that ball?"

"Sure," replied Sewell, "but you didn't ask me that. You asked if Bonura could have gotten it."

When the manager came out to the mound, the pitcher refused to leave the game. "Gee, I can handle the next hitter," he insisted. "I struck him out the first time I faced him, remember?"

The pilot shook his head sadly. "Yeah, but that was this inning!"

Alan Seiden, St. John's U. great little back-court driver, has been a dedicated basketball player ever since he was a kid. His room was a miniature gym. He had a basket hung up and his friends used to play games in there.

One day when he was in his room with his rabbi studying for his confirmation, his parents thought it would be nice to take a candid picture of the two of them at work. So they entered the room—and found Alan shooting at the basket, with the rabbi sitting pathetically in the corner.

"What's going on?" Mr. Seiden asked in amazement.

The rabbi shrugged. "Alan told me if I didn't look at his set shot, he wouldn't study."

Watching skinny Ray Felix, the 6-11 N. Y. Knickerbocker center, being tossed around under the basket like a kite in a tornado, a sportswriter murmured, "There's the only player I've ever seen who's 6 feet 11 inches small."

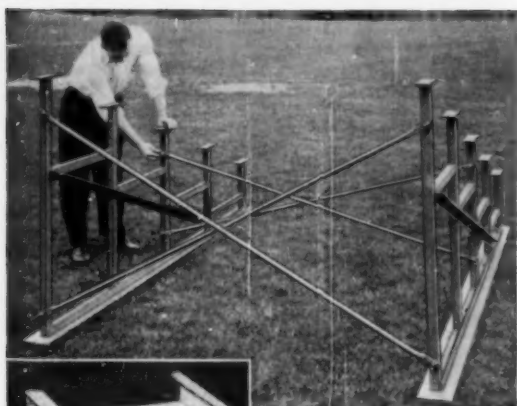
Rocky Graziano, former middle-weight champ, was stopped by a fight fan who mentioned that he had once seen Rocky knocked down in a bout.

"Which time?" Rocky asked. "I got so much resin in me from knockdowns that whenever I pass Carnegie Hall the violins stand at attention."

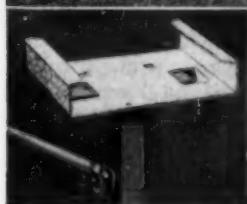
A horseplayer was complaining about a bet he'd lost and said he suspected that the jockey had pulled the horse to keep it from winning. One of his listeners scoffed, "How can such a little guy pull back such a big, strong animal?"

"You don't know jockeys," replied the horseplayer. "A good jockey can hold an elephant two feet away from a bale of hay all day long."

Casey Stengel was something of a playboy back in his Giant days. On occasion, Manager John McGraw would put a detective on his trail. Stengel paired off with Irish Meusel



(ABOVE) Assembly of steel structure is completed by attaching cross braces to frames with wing nuts.



(LEFT) Optional slide plank bolders for frequently disassembled bleachers.



(ABOVE, CENTER) 5-row Budget Master bleachers.



(ABOVE, RIGHT) 10-row section with guard rail. Elevated front cross aisle and 15-row assembly also available.

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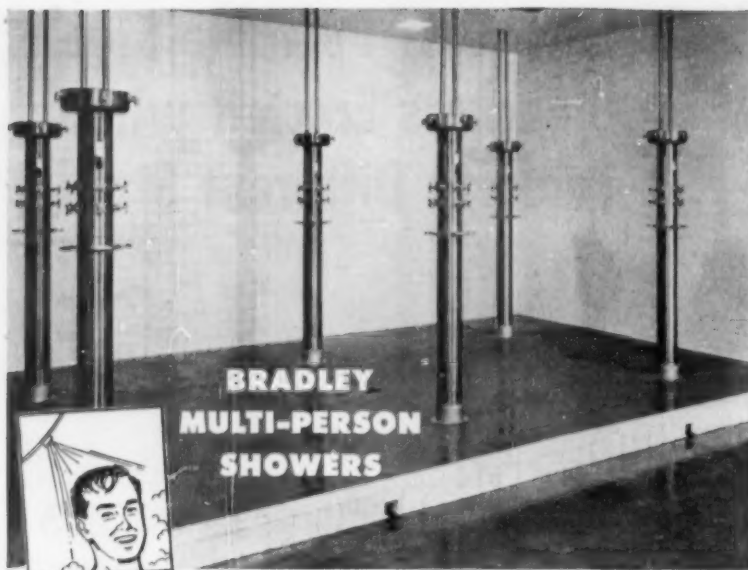
Combinations of full length and half length "All-American" lockers used in the Moorhead State Teachers College.



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for extra-curricular outings, and they led the private eye a merry chase.

Finally Casey became enraged, "I'm particular," he informed McGraw. "From now on I don't want to share a detective with anybody."

Playing over a drought-stricken course in Odessa, Tex., Tommy Bolt became annoyed. "With all the money in Texas," he informed the club manager, "why haven't you been able to get some grass on this course?"

The manager shrugged. "We spent \$70,000 last year on an irrigation system, but the only thing that comes up is oil."

Charley Boswell, the blind golfing champ, was playing a friendly match in a foursome and was hooking or slicing all over the course. As his partner lined him up for a tee shot at a climactic stage in the match, Boswell asked what was the distance of the hole.

"You don't have to worry about length," replied his partner. "It's the width you've got to think about."

All-American Squad

(Continued from page 50)

Tommy Boyer of Fort Smith has been outstanding in Arkansas for two years. He led his team to the state title with a solid all-around performance.

Pat Richter of Madison East played with a poor team, but still was easily the best in Wisconsin.

Bob Cozby, Olympus, Utah was a great scrapper for a big boy, got his share of points, and cleared the boards in superlative fashion.

Pat Doyle of North Marshall, Ky., was truly a standout in a great basketball state. He led his team to the state title with a remarkable combination of marksmanship, generalship, and "fight." He'll probably be a backcourt man in college.

Rich Porter of Kellogg, Ida., was called "the best high school cager I've ever seen" by more than one observer. He sparked his team to an easy state title and never bothered to go after a bagful of points although he averaged 20 for three years.

Steve Pauly of Beaverton, Ore., had great speed, moves and shooting eye.

Tom Kezar of Austin, Minn., was a backcourt man with a deadly shooting eye. His team was upset in the state meet after winning in 1958.

Dom Perno of Wilbur Cross, Conn., led his team to the state title and was a two-year all-stater. Steady boy who got his share of points.

What Is the Point of Sport?

(Continued from page 51)

win the hearts and votes of any sports gathering.

We've always felt that this type of justification is unnecessary; that sports don't need any fustian vindication. That the only justification they require is the physical expression, the joy, the wondrous feeling of *doing* so indigenous in them.

So you can imagine our glow when we picked up a copy of *Physical Recreation*, the Quarterly Journal of the Central Council of Physical Recreation (London), and found this exquisitely framed rationale by Arnold Kaech, director of the Swiss School of Sport and Gymnastics.

Why should we look for a justification for sport? Why insist on making it utilitarian and give it an end outside itself?

Because, doubtless, we live in a time that claims "that every undertaking must be useful, and every man must let himself be used"; and because we can neither imagine nor accept the idea of sport as self-sufficient, owning no particular aim, and finding its true sense and justification precisely in its detachment from material things.

We can be glad that sport is good for health; that sport can mold character; and that, through sport, this or that individual has formed lasting bonds of friendship in defiance of frontiers and oceans.

Even if there were no more to it than joy in the rhythm of the runner's gait, the jumper's illusion of freedom from earthly ties, the helter-skelter down the ski slopes, the sudden cool of a dive, or the passionate, total absorption in a contest—if sport were nothing but aimless, useless play—we should still have no choice but to defend it.

While we are engaged in a sport we move in the blessed realm of childhood; while we are engaged in sport the dreams of youth are still alive within us.

We give freely of ourselves because we ask nothing in return; we are disinterested because we do not ask if our acts are useful. When we engage in sport we are at play and it is only at play that man is truly man, as Schiller has told us.

To many this play seems merely an activity of the body. They see the body in movement, the vigor of a stroke, the swing of the gymnast's arms and legs. But they do not see what goes on inside. They do not see all.

It is as if a man should look at a picture and see nothing but lines and colors, or at a statue and think only of the material of which it is made, or read a score and never hear the music.

The body, and the feats it performs, are ends to them; whereas in true sport the performance is not an end in itself—nor the body either—but the means of expression.

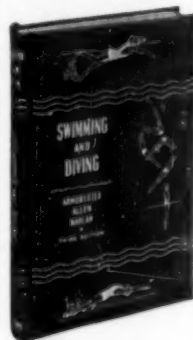
Moving over the ground, thrusting through the wave, gliding over the snowy slopes, or wrestling with the rock face—these are expressions of the well-being won from living close to nature. The body is

but the means of expression, the instrument the soul requires to enable it to measure the territory which has been granted to man, and occupy it to the limit.

Only thus can we explain why "they which run in a race run all, but one receiveth the prize," only thus understand how records can go on forever being broken . . . Sport is the faithful image of the struggle of humanity towards perfection; in sport soul and body together strive to accomplish the age-old aspiration of mankind—"faster, harder, higher."

There lies "the point" of sport, its whole importance, its true meaning. It needs no other justification.

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the point of attack to facilitate the cutting of our backs. As has been stressed previously, any penetration by the defensive line at the point of attack is extremely undesirable. Conversely, we make no attempt to move our internal opponents laterally.

Thirdly, our backs must be able to make a shallow cut after receiving the ball. This shallow cut must be made to capitalize on the blocks at the hole. Since we make no attempt to move the defenders one way or another, the back must pick his hole and cut into it. Since the back usually doesn't receive the ball until he's on the line of scrimmage, it's imperative that our line drive out at least a yard to give him room and time to make

a good cut. The cut itself should be in the shape of a tuning fork (Diag. 3).

We feel that for a back to make a good cut it's extremely important that he cross the line of scrimmage at right angles. We don't want a back to ever slant or angle across the neutral zone because we feel he doesn't hit with maximum force and he has difficulty cutting away from the slant. It's im-

portant that he complete the cut by turning directly up-field.

In specific reference to our off-tackle play, we believe one of its strong points is that it can be run against any type of defense. We do feel, however, that for it to be effective it must be practiced against all possible defensive sets. **Diag. 1.** shows how it might be run against a loose six defense.

Backfield Techniques. We use two types of backfield patterns in attacking the off-tackle hole. One of these is the popular inside belly or drive series. In this pattern, the quarterback opens toward the hole with a short step parallel to the line of scrimmage. He reaches back and places the ball in the fullback's stomach as he hits over the on-side guard. He rides with him for one step and then removes the ball, moves along the line and hands off to the off-side halfback as he cuts up into the hole.

This maneuver is shown in **Diag. 4.** We also run the fullback dive and quarterback rollout from this series.

The other pattern with which we hit this hole is a reverse-pivot, outside belly series. In this series, the quarterback reverse pivots and rides with the fullback into the off-tackle hole. He then fakes a pitch-out to the off-side halfback who's swinging wide (see **Diag. 5.**) We also run a power sweep and belly pitch-out from this series.

There are probably other backfield patterns which would implement this off-tackle play. We're seriously considering hitting the hole from a split-buck series. We feel this would be effective against teams using a middle linebacker. (**Diag. 6.**)

Line Techniques. The on-side end's assignment is to take a maximum split and block the defensive end out. Against a diamond defense, he should go directly at the end. Usually he'll have little trouble as the end is quite outside-conscious.

However, against an umbrella defense the end must first secure inside position by stepping forward with his inside foot and then turning out on his opponent. This also prevents our end from making contact too soon, which would allow the defensive end time to react to the pressure.

The end's assignment against a pinching defensive end isn't an easy one and is the most common reason for the failure of this play. Needless to say, the ends must have considerable work on this block against all types of charges by the defensive end. Coaching points of special note are: (1) the end should block comparatively high, (2) he must keep his feet up under him.

The on-side tackle's assignment is simply to block the opposing tackle back. He can most effectively do this

Off-Tackle Block-Buster

(Continued from page 8)

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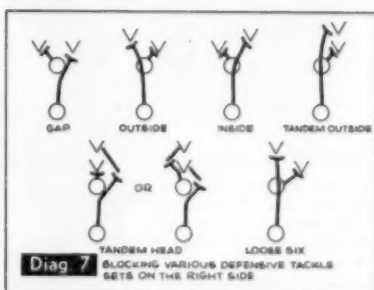
by driving his forehead into his opponent's mid-section and then sprinting through and beyond. We stress that our tackles sprint, not lunge, through their blocks. To go to the ground is to fail. We find the most common reasons for going to the ground are to lunge and/or to bow the head. These faults must be eliminated.

The on-side halfback's assignment is discussed at this point because he blocks at the point of attack in the manner of the linemen. His task is to block through the hole on the opponent signified by the tackle. The tackle indicates whom to block by a code call or visual signal. The assigned opponent is usually the nearest linebacker.

The halfback executes a running shoulder block in which he drives his forehead into his opponent's mid-section and attempts to move him back. Though halfbacks often are called upon to block much heavier opponents, we've found that the quickness and agility of a halfback more than compensate for his lack of weight.

The halfback and tackle must spend considerable time blocking against all possible defensive tackle sets. This blocking should first be "dummy" and then "live." While the tackle should call the blocking to the halfback, the halfback should know the tackle's assignment so that he could block the play by sight if necessary.

The tackle's assignment is as follows: "Block the defensive tackle back. The defensive tackle is the first player on the line of scrimmage outside our guard." Since there are almost always two defenders in the area between our guard and end, the halfback blocks the remaining one. This type of blocking plan against various defensive tackle sets is shown in **Diag. 7**.



Against a "tandem head" set, our tackle drives straight ahead and sticks with the defensive tackle if he stunts inside. However, if he fights outside, our tackle lets him go and picks up the linebacker. The halfback then picks up the defensive tackle. This has proved quite effective and can be executed properly if practiced.

It's evident from **Diag. 7** that most defensive tackle sets may well end up as gap sets; so we work extensively against the gap set. We feel that if we can run this play through a gap eight defense, we can run it through anything.

The on-side guard's assignment against an even defense is to block the man on him back. Against an odd de-

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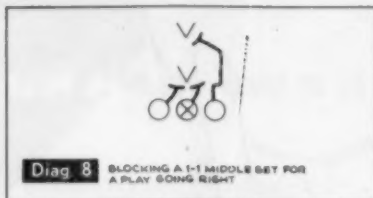
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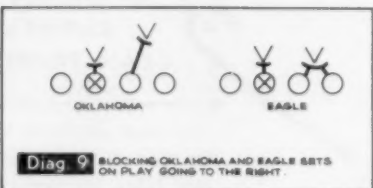
fense with a middle linebacker (1-1 middle set), he blocks the middle linebacker. This is a difficult assignment because the middle linebacker may be stunting or floating.

Good scouting may alleviate this problem, but we've come upon a partial solution by having our on-side guard always play the linebacker for a floater. Our guard drives out two steps and then turns to the inside to meet the backer head on. The center and off-side guard always anticipate a stunt and close the gaps toward the side of the play (see **Diag. 8**).



Diag. 8 BLOCKING A 1-1 MIDDLE SET FOR A PLAY GOING RIGHT

Against an Oklahoma defense (1-2 middle set), the on-side guard tries to run directly over the nearest linebacker. Against an Eagle defense (3-0 middle set), he double-teams on the defensive tackle. These are shown in **Diag. 9**.



Diag. 9 BLOCKING OKLAHOMA AND EAGLE SETS ON PLAY GOING TO THE RIGHT

Our center blocks the man on him back. He must get to him quickly and slip his head to the side of the play. If the man on him has a linebacker directly behind him (1-1 middle set), the center plays it for a stunt situation and fills the gap nearest the play.

Against an even middle set, the center will release to the cut-off and block the first enemy he approaches. In case of an even set with a middle linebacker (2-1 middle set), the center must move across quickly, anticipating the linebacker's flow, and block him in any direction possible.

Our centers have produced several long runs by clipping the linebacker across the hole and breaking the play back behind him.

The off-side guard's assignment is to contain the man on him or the nearest linebacker so he cannot pursue. He must move for position first and then block. As previously mentioned against a 1-1 middle set, the guard must anticipate the stunt and fill the gap nearest the play.

The off-side tackle and end release crossfield. They must cross as close to the line as possible. The tackle blocks the far deep back and the end blocks the middle deep back. These are the "springing blocks" which produce the long run (see **Diag. 10**). An intense desire to knock somebody down is the keynote of these assignments.



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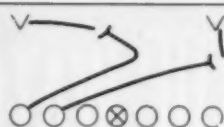
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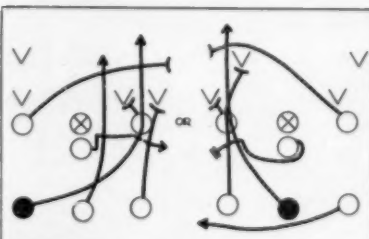
Diag 10 OFF-SIDE END AND TACKLE BLOCKING CROSSFIELD

Drills.

One on one. Considerable work must be done on perfecting the straight one-on-one shoulder block. Each lineman must be able to get movement on a defender playing on his head as well as either shoulder. We tell each of our linemen that unless he can personally defeat the opponent playing opposite him, we won't be able to move the ball. The guards need work on blocking men who are one or two yards off the line of scrimmage as well as those who are up close. The ends need work on their specific problems.

Running shoulder blocking drill. Our backs get considerable work against the dummies and also "live" in perfecting a running shoulder block from about four yards distance. We stress an arm swing which we feel contributes greatly to the force of the blow.

"3 and 7 drill." This drill is so-called because our off-tackle hole is numbered 3 on the right and 7 on the left. This is a skeleton line drill in which there are two defensive tackles and two linebackers. On offense there's a complete backfield, a center, and two tackles. We then run the off-tackle play to either side.



Diag 11 "3 and 7 drill"

We start the drill "dummy" against the various sets or specific sets we expect to meet that week and then shift to "live." We finally allow the defense to line up or stunt into any set they wish in an attempt to confuse the offense. We work this drill a great deal in early season practice and at least once a week during the playing season (see Diag. 11).

Crossfield blocking drill. This drill is shown in Diag. 12. The linemen set up in three files four feet apart. Three dummies are held crossfield at an equal distance from each of the files. A defensive lineman may be placed on the head of the first man in each file to attempt to hold him up. On the snap, the first lineman at each position releases through the inside gap and races crossfield to block the assigned dummy.

We attempt to make the drill as com-

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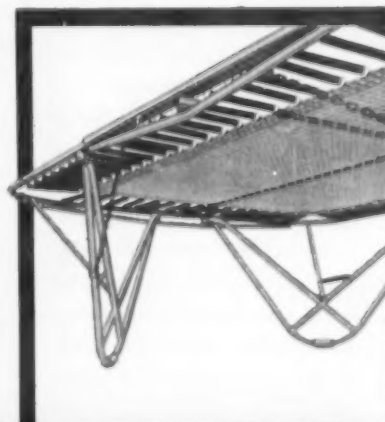
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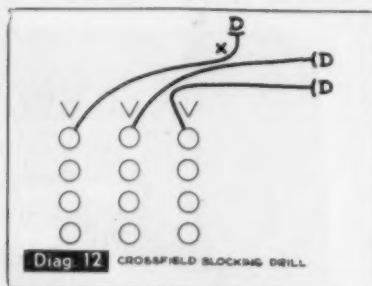
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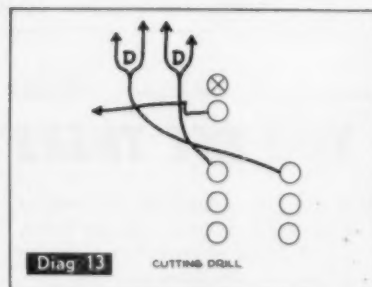
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petitive as possible with the linemen competing by positions. The straight shoulder block is stressed. This block must be thrown high, and the blocker must keep his feet up under him.



Cutting drill. Backs to whom the ball will be given or faked are lined up in their regular positions. Dummies are held in the holes about one yard beyond the line of scrimmage. A play is run, and as the ball-carrying and faking backs approach the holes the dummies are tipped either in or out and the backs cut the opposite.

Only a shallow cut is allowed and the backs complete the cut by turning directly up-field (see Diagram 13). This drill forces the backs to watch the hole and not the ball. We feel it has been invaluable in developing our running attack.



Summary and conclusion. A few of the main coaching points to remember follow:

1. Allow the on-side tackle and half-back to drive their assigned opponents in any direction so long as they obtain movement backward. They must have confidence that the ball-carrier will make the proper cut.
2. The ball-carrier must cross the line of scrimmage at right angles. He must not be slanting.
3. Keep the quarterback operating as close to the line of scrimmage as possible.
4. Hit the hole as quickly as possible because this manner of blocking cannot be sustained.
5. Off-side linemen must travel crossfield very close to the line and with extreme speed.

In disclosing this information, we don't profess to have discovered anything new. We're indebted to Woody Hayes of Ohio State, Duffy Daugherty of Michigan State, and Bennie Oosterbaan of Michigan for nearly all of the concepts involved.

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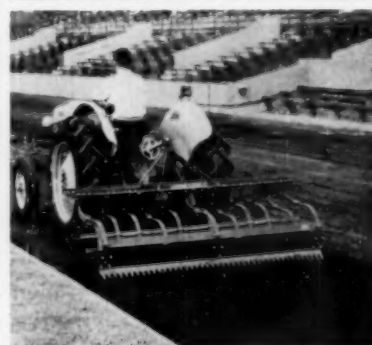
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QB Key to the T

(Continued from page 42)

Passing:

1. Pass only if the possibility of completion is good.
2. Seldom use flat passes (and those should be behind scrimmage).
3. Use passes before being pressured to use them.
4. Yell "Cover Right (left or center)" after passing.
5. Consider the weather and condition of the ball.
6. Avoid underthrowing long passes and overthrowing short passes.
7. Anticipate receivers being open.
8. Roll with any blow after passing.
9. First down is an excellent time to pass.

Signals:

1. Show confidence in your play selection so that teammates will act with the same confidence.
2. See that the offense is set before calling signals.
3. Call (bark) signals clearly and rhythmically.
4. Restrain body to a minimum of movement while calling signals.
5. The use of automatics must be practiced under game-like conditions to be effective.

A new quarterback can quickly lose confidence as the responsibility of this position gradually dawns on him. Therefore, encouragement is more important than criticism at this stage of training.

We like to learn early whether or not a prospect possesses courage. If he cannot face the onrush of defensive linemen with enough calmness to decide quickly (when in passing position) whether to pass or run, he won't become a good quarterback.

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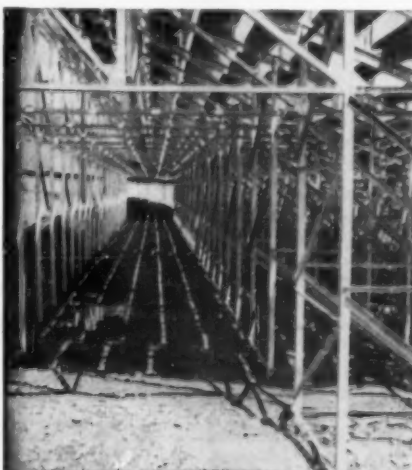
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ADELPHI COLLEGE—Garden City, N. Y. Aug. 17-19. Directors, George Faherty (Adelphi College) and John Sipos, Huntington (N. Y.) H. S. Course: Basketball. Staff: Bones McKinney, Ben Carnevale, George Faherty, others. Tuition: \$20 (includes room and notes). See adv. on p. 66.

ALABAMA UNIV.—University, Ala. Aug. 3-6. Director, Paul Bryant. Courses: Football, Basketball. Staff: Paul Bryant, Frank Howard, Gomer Jones, Frank Mosley, Fred Schaus, Eugene Lambert. Tuition: free, except for out-of-state college coaches (\$25).

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ALL-AMERICAN CLINIC — Bemidji, Minn. June 15-17. Director, K. E. Wilson. Courses: Football, Basketball. Staff: Jack Mollenkopf, Vince Lombardi, Marv Hellings, Forddy Anderson, others. Tuition: \$15.

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ARIZONA COACHES ASSN. — Flagstaff, Ariz. Aug. 17-22. Director, Joe M. Garcia, 4647 W. Whitton, Phoenix, Ariz. Courses: Football, Basketball, Baseball, Tennis, Training. Staff: Bill Meek, Tex Winter, others. Tuition: \$18.50 (plus \$19 for room and board).

ARKANSAS COACHES ASSN.—Little Rock, Ark. Aug. 12-15. Director, Curtis King, Augusta, Ark. Courses: Football, Basketball. Staff: Gomer Jones, John Benington, others. Tuition: Non-members, \$5.

CALIFORNIA WORKSHOP—San Luis Obispo, Calif. Aug. 3-14. Director, Glenn E. DuBose, Napa College, Napa, Calif. Courses: Coaching and Physical Ed. Staff: Jack Curtice, George Ziegenfuss, Peyton Jordan, George Wolfman, others. Tuition: \$5 per week.

COLBY COLLEGE—Waterville, Me. June 17-19. Director, Ellsworth W. Millett. Courses: Football, Basketball. Staff: Floyd Schwartzwalder, Adolph Rupp. Tuition: \$25.

COLORADO COACHES—Pueblo, Colo. Aug. 19-22. Director, Don Des Combes, 525 Midway, Broomfield, Colo. Courses: Football, Basketball, Wrestling. Staff: Ben Martin, Bob Spears, John Hancock. Tuition: \$12.50, members; \$15, others. See adv. on p. 66.

COLORADO UNIV.—Boulder, Colo. June 12-July 17, July 20-Aug. 21. Director, Harry G. Carlson. Courses: Coaching, Phys Ed, Recreation. Staff: Entire University Staff plus others. Tuition: resident, \$35; non-resident, \$75 for each 5-week term.

CONCORDIA COLLEGE—Moorhead, Minn. Aug. 12-15. Director, J. M. Christiansen. Courses: Football, Basketball, Wrestling. Staff: Dave Nelson, Paul Dietzel, Pete Newell, Fred Schaus, Wally Johnson. Tuition: \$15. See adv. on p. 64.

CONNECTICUT UNIV.—Storrs, Conn. Aug. 11-13. Director, J. Orlean Christian. Courses: Football, Basketball, Soccer. Staff: Frank Howard, Branch McCracken, others. Tuition: \$10. See adv. on p. 65.

EASTERN FOOTBALL COACHES — Cold Spring Harbor, N. Y. June 12-13. Directors, Gordon MacDonald, Eastern Military Academy, Cold Spring, N. Y., and Dutch Ouderkirk, West Babylon (N. Y.) H. S. Staff: Len Watters & Staff. Tuition: \$8 (includes meals) or \$15 (includes room and board).

EASTERN PENNA. COACHES ASSN.—East Stroudsburg, Pa. June 15-18. Director, Marty Baldwin, Box 205, East Stroudsburg, Pa. Courses: Football, Basketball, Training. Staff: Ben Martin, Frank Howard, Ray Eliot, John Stiegman, Glen Killinger, Forddy Anderson, Frank Kavanagh, others. Tuition: \$45 (includes room and board).

FELLOWSHIP OF CHRISTIAN ATHLETES—Estes Park, Colo. Aug. 16-21. Director, Don McClanen, 320 Professional Bldg., Kansas City 6, Mo. Courses: All Sports. Staff: Paul Dietzel, Dick Harp, Ben Martin, Frank McGuire, Biggie Munn, Don Faurot, others. Tuition: \$40 (includes room and board). See adv. on p. 66.

FLORIDA A & M—Tallahassee, Fla. June 8-12. Director, A. S. Gaither. Courses: Football, Basketball, Training. Staff: Frank Howard, Ray Eliot, Dave Nelson, Bob Woodruff, Gomer Jones, Andy Pilney, Perry Moss, J. B. McLendon, others. Tuition: \$17 or \$24.50 for one semester of credit in phys. ed. See adv. on p. 64.

FLORIDA COACHES ASSN. — Gainesville, Fla. Aug. 3-6. Director, Carey E. McDonald, Ocala H. S., Ocala, Fla. Courses: Football, Basketball, Baseball, Track, Training. Staff: Dave Nelson, Joe Justice, Mike Long, others. Tuition: non-members or out-of-state, \$15.

FLORIDA STATE UNIV. FOOTBALL—Tallahassee, Fla. June 4-6. Director, Perry Moss. Staff: Forest Evashevski, Perry Moss, Ray Eliot, Frank Clemson. Tuition: \$20. See adv. on p. 66.

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June 22, 23, 24, and 25

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Monticello, New York

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Army, "Lonely End Offense"

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GEORGIA COACHES ASSN.—Atlanta, Ga.

Aug. 6-8. Director, Dwight Keith, 310 Buckhead Ave., N.E., Atlanta 5, Ga. Courses: Football, Basketball. Staff: Andy Pilney, Marvin Bass, Georgia Tech Staff, Adolph Rupp, Joel Eaves. Tuition: \$7, members; \$15, others.

GLACIER PARK—East Glacier Park, Mont.

July 1-2. Director, Wm. O. Carlson. Courses: Football, Basketball. Staff: Woody Hayes, Vince Lombardi, Adolph Rupp, George Mikan. Tuition: \$31 (includes room).

IDAHO COACHES ASSN.—Sun Valley, Ida.

Aug. 10-14. Director, Jerry Dellinger, Jerome H. S., Jerome, Ida. Courses: Football, Basketball, Track, Wrestling, Equipment Care. Staff: Paul Dietzel, Tex Winter, others. Tuition: members, \$10; others, \$15.

ILLINOIS NORMAL-WESTERN ILLINOIS—

Normal, Ill. June 9-10. Director, Howard J. Hancock, Illinois Normal U., Normal, Ill. Courses: Football, Basketball, others. Staff: Jack Mollenkopf, others. Tuition: free.

INDIANA ATHLETIC ASSN.—Lafayette, Ind.

Aug. 3-6. Director, L. V. Phillips, 812 Circle Tower, Indianapolis, Ind. Courses: Football, Basketball. Staff: Pete Elliott, Tex Winter, others. Tuition: \$1, state; \$10, others.

INDIANA BASKETBALL—New Castle, Ind.

July 30-Aug. 1. Director, Cliff Wells, Tulane University, New Orleans, La. Staff: Cliff Wells, others. Tuition: \$10 (includes notes).

INSTITUTE ON ATHLETIC INJURIES—San

Antonio, Tex. Aug. 10-12. Director, Elmer M. Kosub, St. Mary's U., San Antonio, Tex. Courses: All Phases of Prevention and Treatment. Staff: Outstanding Specialists. Tuition: \$20.

KANSAS ACTIVITIES ASSN.—Wichita, Kan.

Aug. 17-20. Director, C. H. Kopelk, 1300 Topeka Blvd., Topeka, Kan. Courses: Football, Basketball, Track, Baseball, Training. Staff: Dal Ward, Forddy Anderson, others. Tuition: \$10.

KENTUCKY UNIV.—Lexington, Ky. Aug. 12-

15. Director, Bernie A. Shively. Courses: Football, Basketball, Track, Baseball. Staff: to be announced. Tuition: Free.

KUTZTOWN CLINIC—Kutztown, Pa. Oct. 17.

Directors, John Silan (Kutztown H.S.) and Le Roy Heckman, Hamburg (Pa.) H. S. Course: Basketball. Staff: Duddy Moore, others. Tuition: \$10.

LOUISIANA COACHES ASSN. — Baton

Rouge, La. Aug. 3-7. Director, Woody Turner, 151 Charles Ave., Shreveport, La. Courses: Football, Basketball, Track. Staff: Paul Dietzel, others. Tuition: \$3, members; \$5, non-members; \$10, out of state.

MICHIGAN ATHLETIC ASSN.—Mt. Pleasant,

Mich. Aug. 17-21. Director, Daniel Rose, Central Michigan Coll., Mt. Pleasant, Mich. Courses: Football, Basketball. Staff: Ara Parseghian, Bill Perigo. Tuition: \$22 (includes room and board).

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MICHIGAN STATE UNIV.—East Lansing, Mich. May 14-16. Director, Burt Smith. Course: Football. Staff: Duffy Daugherty, others. Tuition: \$3.

MISSISSIPPI COACHES ASSN.—Jackson, Miss. Aug. 4-7. Director, Sammy Bartling, Millsaps College, Jackson, Miss. Courses: Football, Basketball, Training. Staff: Bowden Wyatt, Gomer Jones, Hank Iba, others. Tuition: \$10, members; \$15, others.

MONTANA STATE COLLEGE—Bozeman, Mont. June 8-10. Director, Gene Bourdet. Courses: Football, Basketball, Training. Staff: Ara Parseghian, Herb Agocs, Keith Lambert, others. Tuition: \$5.

NEVADA UNIV.—Reno, Nev. June 15-19. Refer to Ath. Dept. Courses: Football, Basketball, Training. Staff: Forest Evashevski, Tex Winter. Tuition: \$20, state resident; \$24, others. See adv. on p. 65.

NEW HAMPSHIRE ATHLETIC ASSN.—Exeter, N. H. June 21-23. Director, Walter A. Smith, 121 No. State St., Concord, N. H. Courses: Football, Basketball, Baseball, Soccer. Staff: Floyd Schwartzwalder, Bob Blackman, Hank Iba, Taps Gallagher, Ralph Lapointe, Roy Dath. Tuition: \$22.50, instate; \$30, out of state (includes room and board); \$17.50, tuition only.

NEW MEXICO COACHES—Albuquerque, N. M. Aug. 2-8. Director, C. H. (Doc) Ledbetter, 1213 Princeton Dr. S.E., Albuquerque, N. M. Courses: Football, Basketball, Baseball, Track, Training. Staff: Bob Blackman, Elvan George, Forddy Anderson, Polk Robison, others. Tuition members, \$10; non-members, \$15.

NEW YORK STATE—Clinton, N. Y. Aug. 24-27. Director, Philip J. Hammes, Proctor H. S., Utica, N. Y. Courses: Football, Basketball, Baseball, Soccer, Wrestling, Training, Rules Interpretation. Staff: to be announced.

NORTHERN ILLINOIS UNIV.—DeKalb, Ill. June 24-25. Director, George G. Evans. Courses: Football, Basketball, Baseball, Track. Staff: Mill Bruhn, Eddie Hickey, others. Tuition: free.

NORTHERN INDIANA BASKETBALL—South Bend, Ind. July 16-17. Director, Jim Tansey, 917 W. Mishawaka Ave., Mishawaka, Ind. Staff: John Jordan, Bill Rohr, Elmer McCall, others. Tuition: \$10. See adv. on p. 64.

NORTHWEST MT. COACHES—Clarion, Pa. May 29-30. Director, Norm Zwald, Clarion (Pa.) Joint H.S. Courses: Football, Basketball, Track. Staff: Outstanding Pa. H.S. Coaches. Tuition: \$5.75 (includes room and board).

OHIO FOOTBALL—Canton, O. Aug. 10-15. Director, Jim Robinson, McKinley H. S., Canton, O. Staff: Paul Dietzel, Woody Hayes, Ara Parseghian, Phil Dickens, Trev Rees. Tuition: \$10, members; \$15, others.

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OKLAHOMA COACHES ASSN.—Tulsa, Okla. Aug. 9-13. Director, Leon Bruner, 3513 N. W. 24, Oklahoma City, Okla. Courses: Football, Basketball, Baseball. Staff: Darrell Royal, Frank Broyles, Jess Thompson, others. Tuition: \$10.

OREGON UNIV.—Eugene, Ore. June 15-19. Director, Arthur A. Esslinger. Courses: Football, Basketball, Baseball, Track, Wrestling, Training. Staff: Jack Curtice, Don Kirsch, Howie Dallmar, Bob Newland, Bill Tomaras. Tuition: \$18. See adv. on p. 65.

ORIGINAL CLINIC—Superior, Wis. July 15-18. Director, Mertz Mortorelli, Wisconsin State College, Superior, Wis. Courses: Football, Basketball, Training. Staff: Ara Parseghian, Milt Bruhn, Adolph Rupp, others. Tuition: \$15.

PRAIRIE VIEW A & M—Prairie View, Tex. July 14-16. Director, W. J. Nicks. Courses: Football, Basketball. Staff: Ray Graves, Bob Rogers. Tuition: \$10.

SOUTH CAROLINA COACHES ASSN.—Columbia, S. C. Aug. 2-7. Director, Harry Hedgepath, 1623 Harrington St., Newberry, S. C. Courses: Football, Basketball. Staff: Darrell Royal, Ben Martin, Tex Winter. Tuition: members, \$5; non-members \$10 one course, \$15 for both. See adv. on p. 65.

SOUTH DAKOTA ATHLETIC ASSN.—Huron, S. D. Aug. 17-19. Director, R. M. Walseth, Box 203, Pierre, S. D. Courses: Football (11, B, 6), Basketball. Staff: R. M. Walseth, Jr., others. Tuition: free.

SOUTHERN ILLINOIS UNIV.—Carbondale, Ill. Aug. 26-27. Director, Andrew T. Vaughan. Courses: Football, Basketball. Staff: Cliff Speegle, Frank McGuire. Tuition: non-members, \$10.

SOUTHWEST MISSOURI ST. COLL.—Springfield, Mo. July 9-10. Director, Aldo Sebben. Courses: Football, Basketball, Training. Staff: to be announced. Tuition: \$5.

SPALDING CLINIC—Monticello, N. Y. June 22-25. Directors, Haskell Cohen and Clair Bee, Publicity Enterprises, 8022 Empire State Bldg., New York 1, N. Y. Courses: Football, Basketball. Staff: Dale Hall, Dave Nelson, Joe Kuharich, Bill Sharman, Dolph Schayes, Clair Bee, Adolph Rupp, Dudley Moore, Bill Rohr, others. Tuition: free. See adv. on p. 63.

TENNESSEE ATHLETIC ASSN.—Cookeville, Tenn. July 21-24. Director, Wilburn Tucker, Tennessee Tech, Cookeville, Tenn. Courses: Football, Basketball, Baseball, Track, Training, Girls Basketball. Staff: Ara Parseghian, Dan Devine, Cliff Wells, others. Tuition: free (room and board, \$9.50).

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TEXAS COACHES ASSN.—Fort Worth, Tex. Aug. 2-7. Director, L. W. McConachie, Perry Brooks Bldg., Austin 1, Tex. Courses: Football, Basketball, Track, Training. Staff: Paul Dietzel, Abe Martin, Jim Myers, Buster Brannon, Bob Rogers, others. Tuition: \$15.

UTAH ACTIVITIES ASSN.—Salt Lake City, Utah. Aug. 17-20. Director, Horace H. Rose, 19 West South Temple, Salt Lake City 1, Utah. Courses: Football, Basketball, Track, Baseball, Wrestling, Tennis. Staff: to be announced.

UTAH STATE UNIV.—Logan, Utah. June 8-13. Director, H. B. Hunsaker. Courses: Football, Basketball, Track, Training. Staff: Dan Devine, Forddy Anderson, others. Tuition: \$20.

VIRGINIA H. S. LEAGUE—Blacksburg, Va. July 14-17. Director, William C. Pace, Virginia H. S. League, Charlottesville, Va. Courses: Football, Basketball, Baseball, Track, Wrestling. Staff: Bud Wilkinson, Bones McKinney, Paul Amen, Frank Howard, others. Tuition: \$5, state; \$10, others.

VIRGINIA STATE COLL.—Petersburg, Va. June 22-26. Director, William W. Lawson. Courses: Football, Basketball. Staff: Jerry Burns, Bill Gunlock. Tuition: \$15.

WASHINGTON COACHES—Spokane, Wash. Aug. 24-28. Director, A. J. Lindquist, 3215 East Mercer, Seattle 2, Wash. Courses: Football, Basketball, Baseball, Track, Wrestling, Training. Staff: Blanton Collier, Everett Case, Jack Mooberry, Ted Bredehoft, others. Tuition: members, free; others, \$10. See adv. on p. 66.

WILDWOOD BASKETBALL—Wildwood Crest, N. J. June 5-7. Director, Bill Esher, 5605 Seaview Ave., Wildwood Crest, N. J. Staff: Jack Ramsay, Paul Arizin, Sam Cozen, others. Tuition: \$25 (includes room).

WISCONSIN COACHES ASSN.—Madison, Wis. Aug. 3-7. Director, Hal Metzen, 1623 Jefferson St., Madison, Wis. Courses: Football, Basketball, Baseball, Track, Wrestling, Tennis. Staff: Milt Bruhn, Ben Martin, Frank McGuire, John Erickson, others. Tuition: \$2, members; \$10, others. See adv. on p. 64.

WISCONSIN STATE COLL.—River Falls, Wis. June 11-12. Director, Fran Polsfoot. Courses: Football, Basketball. Staff: Phil Dickens, Eddie Hickey. Tuition: \$15.

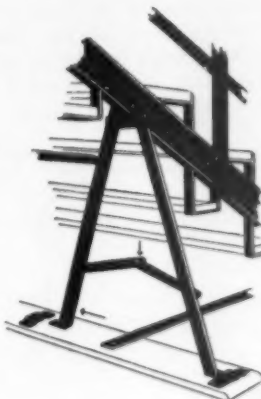
WYOMING COACHES ASSN.—Casper, Wyo. June 5-6. Director, Stan Kouris, Reliance, Wyo. Courses: Football, Basketball, Training. Staff: Jack Curtice, others. Tuition: state, \$5; others, \$10.

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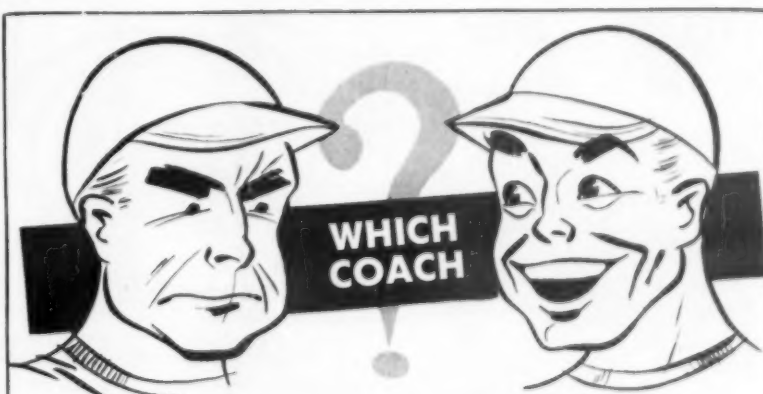


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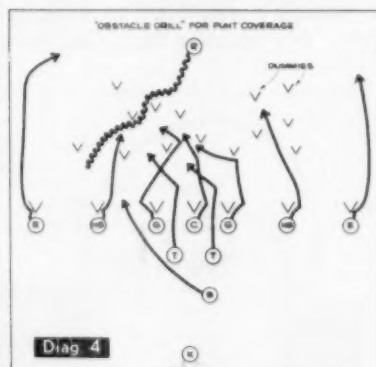
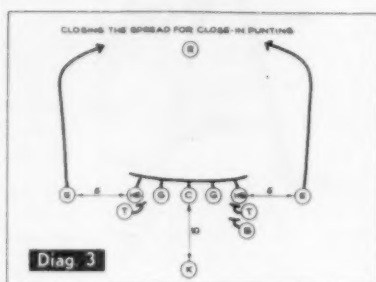
United States Rubber

Semi-Spread Punt

(Continued from page 26)

still establish the position of the kick in order to maintain the proper path of coverage. The receiver can use the dummies as blockers and must run until the last man on the kicking team has tagged him.

To emphasize gang tackling and speed in getting downfield, the last man (excluding the safety) to touch the receiver must run again with the next team practicing coverage. This drill, by the way, is an excellent conditioner.



Constant emphasis on each individual path of coverage will make a runback impossible. As mentioned previously, the kickers and centers should work together daily besides the practice time put in with the entire kicking unit.

There are times, however, when this formation has to be altered to meet particular situations. For example, when it becomes necessary to punt from in close, it's impossible to have the kicker the necessary 14 yards deep.

The adjustments necessary to meet this situation are indicated in **Diag. 3**. In this case only the ends are split and release on the snap, and the protection unit must be careful to block the defense to the outside, not letting anyone break through up the middle. They release upon hearing the kick and follow the same

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coverage principles as outlined previously.

One other point that might prove helpful: Don't have the quarterback give a snap signal for a punt in the huddle. Simply have the blocking back call signals, and the ball will be snapped whenever the center and kicker are ready. This will help prevent a poor pass or kick caused by a snap signal given before either center or kicker was ready.

No punting formation can enjoy success, however, without adequate practice. The formation described above can help eliminate the games that are lost because of a blocked kick or long runback if it's allotted ample practice time.

Modernize your punt formation and perfect it to the extent that it cannot help to beat your own team.

Missouri's Simplified Multiple Offense

(Continued from page 11)

thing is possible in terms of backfield and formations as long as the line blocking remains constant. Formations themselves are easy to install and build upon each other.

The first formation we put in is the fullhouse, or a standing T. This formation along with the other five I'm going to talk about is shown in **Diag. 3**, which also shows our 1 sweep. After our entire offense is put in from the T formation, we take the right halfback and place him a yard out and a yard behind the right end, giving us a formation we call "T-100."

It's still possible from this formation to run our sweep to the right as well as all of our interior traps, and it's also possible to run a quick pitch to the left to either the left halfback or the fullback. It does take some time to work with the right halfback, since his block on the end is now from a closer angle.

The right halfback also has to practice a 2-on-1 block with the offensive end, working on the defensive tackle. This formation is also a very fine passing formation since there are three quick receivers.

The fullback flanker formation also gives us the advantage of a quick block on the end by the right halfback, as well as a good passing offense. We also run dives to the fullback and the left halfback on either side of center, as well as the short trap to the left halfback shown in **Diag. 6**.

Once these three formations—the

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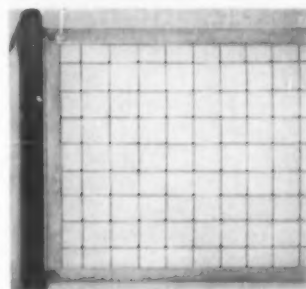
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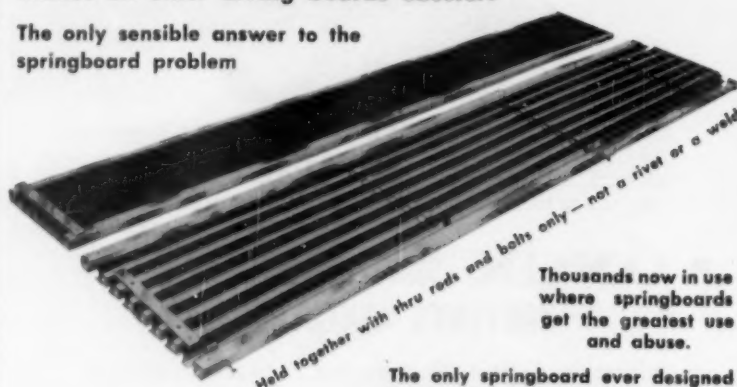
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T, the right half flanker formation, and the fullback flanker formation—are mastered, it's relatively easy to work into a slot back.

For our slot back alignment, we move our right halfback out about 8 yards from the tackle and drop our right end off in the slot between the halfback and the tackle. We use the end in the slot rather than the right halfback so that the blocking assignments on all of our plays will remain the same for the right end.

CAN RUN ALL PLAYS

From this formation, we can run all the plays we run from the right half flanker formation as well as increase the effectiveness of our passing game.

Installing these four variations of the T isn't as difficult as it may seem since, as you'll notice, the quarterback, left halfback, and fullback have the same assignments on all of the plays, as does the line.

I mentioned the single wing earlier in discussing the running pass and the short trap up the middle. Once a few basic plays are put in from the single wing, it's also possible to run a slot back from your single wing, which is a very effective wide running formation and passing formation.

Although this appears to be quite a few formations to put in, it does give you the one advantage of surprise, because in defending you your opposition will generally neglect one or maybe two of these formations; and if you're able to hit upon this early in the game, it's possible to run almost your entire offense from the formation they've worked the least amount of time against.

HAVE MULTIPLE QUALITY

Although I've tried to show you the simplicity of the multiple offense, I may have confused the issue—I certainly hope not. In summary let me say that all offenses have a multiple quality and that any change you can make with ends or flankers that doesn't entail new learning for your players is worth the time it takes to install.

We all know the problems involved in getting ready for an opponent that does a variety of things on offense. It's also possible to put in a few basic plays from the single wing that will present an entirely new problem to the defense without giving yourself any new problems—as long as you keep the blocking the same.

MORE ON OUR STATE H. S. FOOTBALL CHAMPIONS

ANYONE who's ever undertaken any kind of national high school survey can appreciate the enormous difficulties engendered by time, distance, and correspondence.

Scholastic Coach's research crews have done a superlative job of accumulating the data for our All-American H. S. teams and state championship round-ups. But mistakes are inevitable, and we've "goofed" on occasion.

In our round-up of 1958 state high school football champions (March), we definitely fumbled the ball in Maryland. Loyola High of Towson was the unofficial state champ, not Southern.

In Arizona, Pueblo (Tucson) and Mesa shared the unofficial state crown with South Mountain. And in Florida, Coral Gables probably has as good a claim to the title as Pensacola.

Since only about half the states have official playoffs, *Scholastic Coach* is left to its own devices in the others. Newspaper polls help enormously in some instances, but compound the difficulty in others (where they come up with different champions).

"Difficulty of schedule" is a prime factor in designating unofficial champions, and many smaller schools suffer by it. To the several smaller schools who've written to us, we can only extend our sympathy and understanding.

We'd like to assure everyone that we have no axes to grind, that our researchers do a thoroughly conscientious job under great pressure, and that our errors are entirely inadvertent.

FREE SLUGGER YEARBOOK AND SOFTBALL RULES

THE 1959 Famous Slugger Yearbook (prepared by Hillerich and Bradsby) is now ready for distribution.

In addition to an exclusive article by Stan Musial on "Rules for Hitting," it contains 60 pages of baseball interest including pictures of last season's outstanding sluggers, records, highlights of the thrilling World Series, and other interesting features.

Hillerich and Bradsby is also offering the 1959 edition of the Official Softball Rules, which includes rules for both the Fast-Pitch and Slow-Pitch games, pictures of winning teams, records of the 1958 season, and other outstanding features.

The two books may be obtained in quantity free of charge by checking the Hillerich and Bradsby listing in the master coupon on this page.

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To the thousands of schools and colleges which have been using our services for many years and are fully aware of the quality of our workmanship we want to express our appreciation, and assure them that this service, which has made Ivory System the largest reconditioners of athletic equipment in the country, will be continued.

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